



ADU_2020: The restructuring of Higher Education for the 21st century in the Expanded Field of Architecture, Design and Urbanism

PART 0. PARTNERS AND ASSOCIATES	2
PARTNERS PARTICIPATING IN THE ACTION	2
ASSOCIATES OF THE PARTNERS PARTICIPATING IN THE ACTION	3
TOTAL COST AND DURATION OF THE ACTION	3
PART A. CONCEPT NOTE	4
1. RELEVANCE OF THE ACTION	4
2. DESCRIPTION OF THE ACTION AND ITS EFFECTIVENESS:	5
3 SUSTAINABILITY OF THE ACTION	7
PART B. APPLICATION FORM.....	9
1.1. Title	9
1.2. Locations	9
1.3. Cost of the action and amount requested from the Contracting Authority	9
1.4. Summary	10
1.5. Objectives	11
1.6. Relevance of the action.....	12
1.7. Description of the action and its effectiveness	15
1.8. Methodology.....	23
1.9. Duration and indicative action plan for implementing the action	27
1.10. Sustainability (max 3 pages)	30
1.11. Logical framework	33

PART 0. PARTNERS AND ASSOCIATES

PARTNERS PARTICIPATING IN THE ACTION

Applicant	Facultad de Arquitectura, Diseño y Estudios Urbanos, Pontificia Universidad Catolica de Chile, Chile . Professor Margarita Greene (APPLICANT) (Coordinators: Prof. Fernando Perez & Prof. Pilar Urrejola)
Partner 1	Sint-Lucas School of Architecture, Hogeschool voor Wetenschap & Kunst, Brussels/Ghent, Belgium . (EC COORDINATOR) (Coordinators: Prof. Yves Schoonjans & Prof. William Lievens)
Partner 2	Facultad de Arquitectura y Urbanismo, Universidad de Belgrano, Buenos Aires, Argentina . (Coordinators: Prof. Alfonso Corona & Prof. Libertad Vigo)
Partner 3	Facultad de Arquitectura, Diseño y Urbanismo, Universidad Privada de Santa Cruz de la Sierra, Santa Cruz, Bolivia . (Coordinators: Prof. Victor Hugo Limpas & Prof. Verónica M. Melgar)
Partner 4	Programa de Pos-graduação em Urbanismo (PROURB), Faculdade de Arquitetura e Urbanismo, Universidade Federal do Rio de Janeiro, Brazil . (Coordinators: Prof. Denise Pinheiro Machado & Prof. Rachel Coutinho da Silva)
Partner 5	Universidad Veritas, San José, Costa Rica . (Coordinators : Prof. Juan Carlos Sanabria & Prof. Adrian Aguilar)
Partner 6	Maestría en Arquitectura de la Universidad Nacional de Colombia, Bogota, Colombia . (Coordinators: Prof. Rodrigo Cortés & Prof. Fernando Arias)
Partner 7	Instituto Superior Politécnico José Antonio Echeverría (ISPJAE), Dirección de Extensión Universitaria, La Habana, Cuba . (Coordinators: Prof. Ada Portero & Prof. Dania González)
Partner 8	Facultad de Arquitectura y Diseño, Universidad Catolica de Santiago de Guayaquil, Ecuador . (Coordinators: Prof. Rosa Edith Rada & Prof. Ivette Arroyo).
Partner 9	School of Architecture, Aristotle University of Thessaloniki, Greece . (Coordinators: Prof. Constantin Spiridonides (Head of ENHSA) & Prof. Maria Voyatzaki)
Partner 10	Facultad de Arquitectura, Universidad de San Carlos de Guatemala, Guatemala . (Coordinators: Prof. Carlos Valladares & Prof. Karim L. C. Gutiérrez)
Partner 11	Facultad de Arquitectura, Universidad de Panama, Panama . (Coordinators: Prof. Ricardo Ortega & Prof. José Acosta)
Partner 12	Facultad de Arquitectura, Universidad Nacional de Asunción, San Lorenzo, Paraguay . (Coordinators: Prof. Cesar Diarte & Prof. Claudia Fleitas))
Partner 13	Facultad de Arquitectura y Urbanismo, Pontificia Universidad Católica del Perú, Lima, Peru . (Coordinators: Prof. Freddy Cooper & Prof. Manuel Flores)
Partner 14	Escuela Técnica Superior de Arquitectura, Universidad de Sevilla, Spain . (Coordinators: Prof Carmen Galan & Prof. Rafael Herrera)
Partner 15	Department for Architecture, Chalmers University of Technology, Sweden . (Coordinators: Prof. Saddek Rehal & Prof. Ana Betancour)
Partner 16	Department of Architecture, University of Strathclyde, Glasgow, Scotland, UK . (Coordinators: Prof. Michael Angus, Prof. Sergio Porta & Prof. Michael Mehaffy).
Partner 17	Facultad de Arquitectura y Urbanismo, Universidad Central de Venezuela, Caracas, Venezuela . (Coordinators: Prof. Alessandro Famiglietti & Prof. Ana María Mendoza).

ASSOCIATES OF THE PARTNERS PARTICIPATING IN THE ACTION

1	Colegio de Arquitectos de Chile (CA) Country of Registration: Chile
2	European Association for Architectural Education (EAAE-AEEA) Country of Registration: Belgium
3	Unión de Escuelas y Facultades de Arquitectura de América Latina (UDEFAL/UDUAL) Country of Registration: Argentina
4	Asociación Colombiana de Facultades de Arquitectura (ACFA) Country of Registration: Colombia
5	Fundación Universidad de Bogotá Jorge Tadeo Lozano (UJTL) Country of Registration: Colombia
6	Colegio Provincial de Arquitectos de Guayas (CAE-GUAYAS) Country of Registration: Ecuador
7	European Network of Heads of Schools of Architecture (ENHSA) Country of Registration: Greece
8	Asociación Paraguaya de Arquitectos (APAR) Country of Registration: Paraguay
9	Urban Research and Design Laboratory, Technische Universität Berlin (U-Lab, TUB) Country of Registration: Germany
10	Interamerican Development Bank (IDB) Country of Registration: USA

TOTAL COST AND DURATION OF THE ACTION

Total eligible cost of the action (A)	Amount requested from the Contracting Authority (B)	% of total eligible cost of action (B/Ax100)
2.778.443,32 EURO	2.159.576,00 EURO	77,73%
Total duration of the action:	36 months	

PART A. CONCEPT NOTE

1. RELEVANCE OF THE ACTION

During the last years Latin America (LA) has suffered a complex social, economic and spatial process that imposes new expectations and demands on the built environment field: that is *Architecture, Design and Urbanism* (abbreviated as **ADU**). On the one hand the region's rapid urbanization process has created vast areas with insufficient urban services and equipment, leaving a footprint of physical, economic and social problems which will take years to improve and turn into a proper, sustainable and enriching urban fabric. On the other hand, technological development has arrived to many of LA's major cities – intelligent buildings, communication networks, sophisticated infrastructure – creating isolated areas of prosperity and development. At the same time the region has been affected by a string of natural disasters – earthquakes, tsunamis, volcanoes and tornados – that have damaged many urban areas forcing quick responses from the authorities.

One of the ways in which the traditional Higher Education Institutes (HEIs) of Latin America involved with the built environment have responded to these challenges, is by encouraging their schools of architecture, geography or design to carry out their studios and courses about real and relevant world problems. However, this strategy has yet not been able to provide students with the methodological and theoretical tools necessary to intervene the built environment in a comprehensive manner. As a result, the ADU disciplines have lost presence in the professional world and among public bodies, leaving the field with little direction and subject to the result of market forces, political decisions or emergency actions.

In this complex setting plagued by poverty, inequality, low social sustainability and emergencies with a strong technological development at arm's length, there is a need to rethink the traditional built environment field on a human base, and understand it as an *expanded field*. That is, not only the ADU professionals' field, but also one where many disciplines converge and have to interact: architecture, urban planning, transport planning and engineering, urban geography, design, landscape architecture and others. We believe that a new generation of ADU professionals is needed where critical thinking, but especially *creative design*, *sustainable articulation* and *trans-disciplinary communication* are essential.

The required skills and competences in the education of architects, designers and urban planners, which are crucial to be more responsive to the changing societal and professional needs, have a specific complexity¹. Unlike the hard sciences, the ADU disciplines both shape and reflect the very specific characteristics of the regions in which they are practiced. Thus the formation of these professionals for the 21st century needs to include the knowledge of specific and necessary subject-related skills, but more importantly, some common and regional specific competences that will allow them to respond to society's changing needs in the built environment appropriately. In this context, it is essential for HEIs to establish strong partnerships with public authorities and professional bodies, in order to provide valid responses to answer these challenges and to ensure an appropriate formation in lieu of future employability. The training of ADU professionals is being currently questioned within the HEIs, but there is no consensus about new curriculum directions and the refined particular competences that these new professionals should have.

In an open world there is a real need for a better intercultural understanding of global and local parameters. It is eminent and mutually beneficial, to establish a bridge between EC and LA HEI's, creating bigger synergy and facilitating research, professional mobility and collaboration towards lasting educational and professional cooperation between both continents. In the last years important steps have been taken in this line through previous Alfa Projects: the *Tuning Project-LA* and *ENHSA/LA-Project*². These projects pinpointed new challenges for the education of designers in the 21st century: (i) further defining of competences in relation to regional needs; (ii) identifying actions to move towards competence-based education; (iii) developing new performance competence-based educational techniques and strategies in relation to the specific global/local context³. In this new project we want to take the results already achieved into a next phase, expanding them to a broader area that we have called the *expanded field*. Four partners of the Tuning Project are members

¹ Doucet I. & Janssens N. (2011) *Transdisciplinary Knowledge Production in Architecture and Urbanism*. Spiridonides C. & Voyatzaki M. (2010) Educating architects towards innovative architecture.

² ENHSA/LA—Creating Competences Based Architectural Curricula for Transparency, Quality and Mobility. (EHNSA = European Network of Heads of Schools of Architecture; ca 80 EC HEIs).

³ Reflections on and outlook for higher education in Latin America, 2008, pp.82-101 (EAAE = European Association of Architectural Education).

of this consortium to assure continuity. Our partner ENHSA (and the EAAE) contributes to the definition and establishment of a common EC HEI Area in relation to their local needs and particularities.

It is important that precisely now, at a time when Latin American HEIs are at the start of a curricula renewal and reform considering the challenges ahead, an academic interchange consortium between European and Latin American HEIs is created, such as the one we are proposing here, with the ambition to restructure Higher Education for the 21st century in the Expanded Field of Architecture, Design and Urbanism.

The overall objective of this proposal is to develop measures and actions for restructuring the HEIs in ADU of LA and the EC, to the demands of an (ever) changing international world, improving the future employability of their graduates and the quality of life of the urban population in a sustainable way, especially the traditionally excluded urban poor.

To meet this ambitious overall objective, the following *specific objectives* are being considered:

1. To map the existing curricula of the HEIs in the consortium in relation to the LA-Tuning Project and the professional field, in accordance with the needs detected by public authorities and professional bodies.
2. To define, describe and identify indicators and to produce guidelines for their implementation in renewed curricula, to enhance *creative-design* and *trans-disciplinary thinking* among ADU students; this has to be made in accordance with the needs detected by public authorities and professional bodies.
3. To identify *renewed professional areas* for the 21st century in a regional context, in order to raise the employability of ADU graduates, clarifying the new skills and competences required in accordance with public authorities, professional and economic bodies in a sustainable approach.
4. To define and refine the *common and regional specific competences* for the different Master programs in ADU in relation to these renewed challenges, describing the indicators and guidelines for implementation in a renewed curriculum.
5. To detect, assess and describe *new practices on competence-based teaching* to achieve the desired competences indicated in points (2) to (4) at all levels. This implies the implementation of teaching methods and creative teaching in a renewed curriculum. It is expected that a specific space for knowledge, reflection and transference of creative and innovative experiences in the teaching of ADU, will be generated promoting qualitative innovation.
6. To make *concrete propositions to update, modernize and synchronize* university curricula in architecture, design and urban planning.
7. To disseminate the results to other HEIs, local governments and professional bodies in the region.

We believe that this will allow setting a more structured *Common Higher Education Area* in the region based on the process of regional integration.

The *direct target groups* of this project are the *academic staff* and the *students* of the HEIs involved, which will gain from the direct experience of participating in the activities and from the curricula improvements. They will also be better prepared to operate in an intercultural environment of architecture, design or urbanism. In second place other LA/EU HEIs, that will be invited to participate in workshops, seminars and conferences, will also benefit. Also, *HEIs associated with related topics* such as landscape design, urban geography, transport planning and engineering, sociology, anthropology, ecology and also *other educational Master programs*, will benefit from the description of common elements within the trans-disciplinary competences and best practices designed to achieve them. The *final beneficiaries* of the project will be the urban citizens and local governments, who will see their quality of life improved by inhabiting better and more efficient buildings and cities.

2. DESCRIPTION OF THE ACTION AND ITS EFFECTIVENESS:

The above mentioned overall and specific objectives will be accomplished through the enlargement of an existing solid working Alfa consortium to 18 HEIs broadly spread over LA. The idea is that the complexity of the total (global) in combination with the regional specific (local over Latin America) can be grasped. Four partners of the new consortium are active in the LA-Tuning Project. Local actors (governments and professional bodies) will be actively involved as associates. Two coordinators per partner are involved in the project. Work-teams/focus-groups will be made responsible for the different objectives described. Each academic institution will share its experience at the national level with other HEIs of the country, by extending invitation to the activities.

A system of interrelating actions to be assessed in a controlled and iterative way will produce intermediate and final results (the project is for three years or six periods of one semester (S1 to S6)).

- Seven half year *Consortium Network Meetings* for managing, assessing and developing strategies and actions of the project, in order to guarantee results and full coherence. Internal discussion about the results of the actions. All partners are active participants (S1, 2, 3, 4, 5, 6, 6).
- Six work-teams/focus-groups of members of the consortium, each responsible of previously defined goals. Team 1: Mapping existing programs; Team 2: New professional areas; Team 3: Creative-design and trans-disciplinary thinking; Team 4: Common and regional specific competences; Team 5: New educational methods; Team 6: Propositions to update and synchronize university curricula in ADU, in line with the European approach.
- *Mapping* the existing programs and master theses (competences, process, content, results) of all partners through SWOT analysis, in relation to the LA-Tuning project and needs of the professional field, to achieve a matrix depending of changes towards curricula development (S2, 3, 4)
- Three *Annual Conferences* for academics and managing staff, students, local governments and professional bodies to discuss, evaluate and synthesise the results in terms of their usability in different academic environments and regional contexts. For each conference 30 travel grants will be offered to academics of other universities in the eight less developed countries in LA (Bolivia, Peru, Ecuador, Paraguay, Honduras, El Salvador, Guatemala and Nicaragua), to periphery HEIs and to local associates, to maximise participation on the results of the project. With this action we want to enforce the discussion aiming at a broader basis for specific objectives (1) to (6).
 - Year 1 Topic: Renewed professional areas, and common, regional specific and trans-disciplinary competences and indicators (S2)
 - Year 2 Topic: New practices on competence-based teaching as a function of the new challenges. A report will be made which will be amended by the consortium and stakeholders. All partners are active participants (S4).
 - Year 3 Topic: Propositions to update, modernize and synchronize the university curricula in ADU. A final conference will be organised where the project results will be discussed in an open forum. Keynote specialist speakers will be invited. All partners are active participants (S6).
- Three *Design Workshops* and six *Pilot Projects* are proposed to refine and specify the detected 'common' and 'regional specific', and 'trans-disciplinary' competences in relation to the renewed professional areas; here we will also test the new teaching methods in lieu of the objectives of the project. All partners are active in the teaching or in observing to record, discuss, confront and compare the used methods and their effectiveness. Participation of the local government and professional bodies is essential. After each action a report and matrix will be made about the specific objectives (2) to (5) as a function of curricula development. The results will be presented by the work-teams/focus-groups at the conferences and discussed in plenum. From this, guidelines for teaching and best practice will be distilled (S2, 3, 4, 5). The two type of actions are:
 - Three *Intensive Design Workshops* (10 days) with students (as often done in Master of Architecture Programmes). Students and visiting professors of all partners will interact in a design-studio methodology on a precisely defined common issue and urban site. Trans-disciplinary involvement with local stakeholders and professional bodies, and a target population is essential. Topics: Workshop 1: 'Creative design thinking and social sustainability'; Workshop 2 and 3: 'Detected new professional area'. In each workshop new ways of teaching will be implemented.
 - Six Pilot Projects (one semester). The pilot-projects will work in parallel design-studios on a common issue (detected in the workshops) but on different locations. Tackled in parallel by a minimum of six partners, addressing a global problem on a local scale, having trans-disciplinary involvement with local associates and a target population. In these parallel design studios, collaborative design will be used through a common issue, e-learning and blended learning⁴. The differences in local and regional practices and regional specific elements can be distilled. While in the workshops students are confronted face-to-face by professors of different countries, backgrounds and teaching methodologies for a short period, the pilot-projects work for a full semester through e-learning.
- During the project an *interactive discussion website* will be active on the topic, open not only for members but also for other Schools or Departments of ADU in the EC and LA.

The project considers the following results:

- Concrete propositions to restructure and synchronize the university curricula for the 21st century in the Expanded Field of Architecture, Design and Urbanism, in line with the European approach and as a function of the aforementioned new challenges.
- Identification of renewed professional areas for the 21st century in a regional context,

⁴ The lead-coordinator (EU) was partner in a virtual campus program www.oikodemos.org.

- A description of the common and regional specific competences and their relation to the curricula, and the description and illustration of the trans-disciplinary competences and creative design thinking, and the indicators to implement them in a renewed curricula.
- A handbook of 'best practices' on competence-based learning in a design context, to help the change towards competence learning education, with guidelines to implement them in a renewed curricula.
- A multilateral agreement, at the end of the project, to try and carry out the formulated propositions on HEIs at the national level.
- A multilateral agreement (signed document), at the end of the project, by the partners for further cooperation and monitoring, in interaction with the associates and other HEIs and professional bodies.
- Publications in journals; also, a website will be produced informing on the experiences, results and innovations achieved by the project.

3 SUSTAINABILITY OF THE ACTION

The project will have a large impact on the quality enhancement and development of a sustainable curriculum in the participating universities. Defining (1) to (6) as specific objectives with concrete propositions will create synergy of the HEIs with respect of regional identity. Including local government and bodies, academic management staff in the project supports the implementation of the results. Partners will not only benefit from the program personally, they will also share and distribute their experiences within their own (already existing) networks within the country or region. That will lead towards a further synchronization of institutions' curricula, compatible and readable diplomas, the use of similar and comparable structures for training, interchange of students and staff, thus leaving the system open for further improvement and networking.

Methodology: The project uses the well-known system of critical questioning by spiral iteration (analysis/planning/application and testing/evaluation) and formative and summative evaluations. Creating a Workteam per goal gives concrete responsibility to a group to achieve results. Half-year meetings ensure the coherence and strict follow up and development of the project. In the meetings common design issues, locations, teams are defined in function of the wanted results. After each combined-action (workshop/pilot project/swot analysis) the teams are following up the results and translate them in a report. The reports are presented and discussed on the consortium meetings and on the yearly conferences with other HEI's, local governments and professional bodies. From this step a next cycle of activities (3 times) of design workshops and pilot projects and SWOT analysis are initiated. Step for step the results for (1) to (6) are formulated. During the whole time span of the project a permanent web discussion will be present online.

Initial risk analysis and eventual contingency plans: The project proposal aims at maximizing success. This is achieved by repeated critical questioning and iterative actions; formative and summative evaluations; work-teams/focus-groups with well defined tasks; evaluations and the presence of external experts and critics; multiple action-groups and action takers; broad in depth discussions with associates and indirect partners (other HEI's, local governments, professional and economic bodies); involvement of academic management staff; permanent web discussion forum. Initial risk analysis and eventual contingency plans, as follows:

- A coordinator leaves the partner HEI (high). Action: Each HEI has 2 coordinators. The other coordinator will find a new companion.
- A HEI cannot perform an action (medium). Action: Lead coordinators LA/EU redistribute the action to a later date of place.
- A HEI can't fulfil its obligations (national disaster, political instability, or other) (low). Action: Lead coordinators LA/EU redistribute the tasks towards the other partners.
- The results of a person or a Workteam don't meet quality standards. (low/medium). Action: an evaluation committee (using iterative formative evaluations) takes actions to resolve the problem in time.
- A HEI can't contribute its 2% own budget. (low). The own contribution is mainly paid by personnel cost. Lead coordinators LA/EU will take measures towards the higher management of the HEI. There are enough margins to attain the compulsory 20% of the budget.
- Website-server fails. (low) An EC-HEI takes all measures to secure the data. A back up is made. The project is not so technically sensitive.
- Physical injury of a participant (low/medium). Action: all HEI's must take insurance for travel.

Dissemination: Each semester a working document will be produced and published in the web. A set of Final Publications will be prepared regarding: (i) the expanded field for the new millennium (ii) competences for the ADU professionals (iii) pedagogical methods for the formation of ADU professionals (iv) a final discussion on standards and common curricula for LA.

Sustainability of the action after the project:

- Concrete propositions to restructure and synchronize the university curricula in ADU in line with the European approach and in function of new challenges are given to the highest management level in the HEI's, local governments (Ministries of Education, Housing and Urbanism) and professional entities (Colegios Nacionales) for realization.
- The handbook best practices on competence based learning in a design context will help the change towards competence learning education. Good practices will have a longer and wider benefit for the local curricula, as it will raise the quality of teaching and the common standards for quality management.
- A common educational space with local/regional specificity will occur (long lasting strategy).
- All partners will sign a multilateral agreement for further cooperation and monitoring in interaction with the associates ENHSA & ACE, MERCOSUR, the regional professional bodies, ARQUISUR, AUGM, ELEA, CLEFA, Latin American Architecture Bienal, ACAAI and the new LANHSA.
- Bilateral agreements between the HEI's.

PART B. APPLICATION FORM

1.1. Title

ADU_2020: The restructuring of Higher Education for the 21st century in the Expanded Field of Architecture, Design and Urbanism

1.2. Locations

Country(ies), region(s), town(s)

- **Argentina**, Buenos Aires, Facultad de Arquitectura y Urbanismo ,Universidad de Belgrano.
- **Bolivia**, Santa Cruz, Santa Cruz de la Sierra, Facultad de Arquitectura, Diseño y Urbanismo, Fundación Universidad Privada.
- **Brazil**, Rio De Janeiro, PROURB – Programa de Pos-graduação em Urbanismo –Faculdade de Arquitetura e Urbanismo, Universidad Federal do Rio de Janeiro.
- **Chile**, Santiago de Chile Facultad de Arquitectura, Diseño y studios Urbanos, Pontificia Universidad Catolica de Santiago de Chile.
- **Colombia**, Bogota, Maestría en Arquitectura de la Universidad Nacional de Colombia.
- **Costa Rica**, San José, Universidad Veritas, San José.
- **Cuba**, Habana, Instituto Superior Politécnico José Antonio Echeverría (ISPJAE), Facultad de Arquitectura.
- **Ecuador**, Santiago de Guayaquil, Facultad de Arquitectura y Diseno, Universidad Catolica de Santiago de Guayaquil.
- **Guatemala**, Guatemala city, Facultad de Arquitectura, Universidad de San Carlos de Guatemala.
- **Panama**, Panama-city, Facultad de Arquitectura, Universidad de Panama.
- **Paraguay**, San Lorenzo, Facultad de Arquitectura, Universidad Nacional de Asunción.
- **Peru**, Lima, Facultad de Arquitectura y Urbanismo de la Pontificia Universidad Católica del Perú.
- **Venezuela**, Caracas, Facultad de Arquitectura y Urbanismo, Univers. Central de Venezuela.

EC

- **Belgium**, Brussels/Ghent, Sint-Lucas School of Architecture, W&K.
- **Greece**, Thessaloniki , School of Architecture, Aristotle University of Thessaloniki, **Greece**.
- **Spain**, Sevilla, Escuela Técnica Superior de Arquitectura, Universidad de Sevilla, Sevilla.
- **Sweden**, Gotenborg, Chalmers University of Technology, Department for Architecture,.
- **UK**, Glasgow, Department of Architecture, University of Strathclyde,.

1.3. Cost of the action and amount requested from the Contracting Authority

Total cost of the action (A)	Amount requested from the Contracting Authority (B)	% of total eligible cost of action (B/Ax100)
2,778.443,32 eur	2.168.376,00 eur	77,7%

1.4. Summary

Total duration of the action	36 months
Objectives of the action	<p>The overall objective is to develop measures and actions for restructuring the HEIs in Architecture, Design and Urbanism (ADU) of Latin America (LA), to the demands of a changing world, improving the future employability of their graduates and the quality of life of the urban population in a sustainable way, especially the traditionally excluded urban poor. To meet this objective, the following <i>specific objectives</i> are being considered:</p> <p>(i) To <i>map the existing curricula</i> of the HEIs in the consortium in relation to the LA-Tuning Project, in accordance with the needs detected by public authorities and professional bodies. (ii) To define, describe and identify <i>indicators</i> and to produce guidelines for their implementation in a renewed curricula, to enhance <i>creative-design</i> and <i>trans-disciplinary thinking</i>. (iii) To identify <i>renewed professional areas</i> for the 21st century in a regional context, clarifying the new skills and competences required. (iv) To define the <i>common and regional specific competences</i> for the different Master programs in ADU in relation to these renewed challenges. (v) To detect and test <i>new practices on competence-based teaching</i> to achieve the desired effects. (vi) To make <i>concrete propositions to update, modernize and synchronize</i> university curricula in ADU. (vii) To disseminate the results to other HEIs, local governments and professional bodies in the region.</p>
Partner(s)	<p>Argentina, Univ. de Belgrano/ Bolivia, Univ. Priv. Santa Cruz de la Sierra / Brazil, Univ. Fed. de Rio de Janeiro / Chile, PUC, Santiago / Costa Rica, Universidad Veritas, Colombia, Univ. Nac. de Colombia / Cuba, ISPJAE/ Ecuador, Univ. Catolica de Santiago de Guayaquil / Greece, Aristotle Univ. of Thessaloniki / Guatemala, Univ. de San Carlos de Guatemala / Panama, Univ. de Panama, Panama / Paraguay, Univ. Nacional de Asunción, San Lorenzo / Peru, PUC, Lima / Venezuela, Facultad Universidad Central de Venezuela / Belgium, St-Lucas School of Architecture / Spain, Univ. de Sevilla / Sweden, Chalmers Univ. of Technology, UK, Univ. of Strathclyde.</p>
Target group(s)	<p>The <i>direct target groups</i> of this project are the <i>academic staff</i> and the <i>students</i> of the HEIs involved, which will gain from the direct experience of participating in the activities and from the curricula improvements, and will be better prepared to operate in an intercultural environment. The <i>indirect target groups</i> are all HEI's in LA & EU in Architecture, Design and Urbanism and in <i>related topics</i> (such as landscape design, urban geography, transport planning and engineering and ecology) that will benefit from the proposed strategies and guidelines for curriculum-development.</p>
Final beneficiaries	<p>The <i>final beneficiaries</i> of the project will be the ADU students that will be educated through competence-learning in function of the demands of an (ever) changing international world, improving their future employability. Also, the <i>final indirect beneficiaries</i>, will be the urban citizens who will see their quality of life improved by inhabiting better and more efficient buildings and cities.</p>
Estimated results	<p>Common proposal on curriculum development in ADU in tune with the demands of the globalized world. The proposals in the final report will give all HEI's in ADU strategies to develop their curricula in function of the development of the higher education, creating regional integration and social cohesion as well as a common higher education area.</p>
Main activities	<p>Seven half year Consortium Network Meetings, SWOT analysis of running partners' programmes, six large Pilot Projects, three Design Workshops, three Conferences and an interactive discussion on the website.</p>

1.5. Objectives

The overall objective of this proposal is to develop measures, actions and strategies for restructuring and developing the education curricula of HEIs in the expanded field of Architecture, Design and Urbanism (ADU) in Latin America (in line with the previous ALFA projects, the Tuning Project LA and the ENHSA/La-project)⁵, in function of needed competences for the demands of an (ever) changing international world. The aim is twofold: on the one hand to improve the future employability of the ADU graduates, and on the other hand, to improve the quality of life of the urban and rural population in a sustainable way, especially the traditionally excluded urban poor.

To meet this ambitious overall objective, the following **specific objectives** are being formulated:

1. To identify renewed professional areas for the 21st century in a regional LA context, in order to raise the employability of ADU graduates, clarifying the new skills and competences required in accordance with public authorities, professional and economic bodies in a sustainable approach.
2. To define and refine the common and regional specific competences for the different Master programs in ADU in relation to the challenges of the new millenium, describing the indicators and guidelines for implementation in a renewed curriculum.
3. To map the existing curricula of all partners in function of:
 - (i) the description of competences and course content of the HEIs in the consortium in relation to the LA-Tuning Project;
 - (ii) the new defined common and regional specific competences identified for the renewed professional fields in a regional LA context;
 - (iii) the needs detected by public authorities and professional bodies in the field.
4. To define, describe and identify indicators and produce guidelines for their implementation in a renewed curricula, that enhances creative-design and trans-disciplinary thinking among ADU students; focusing on the content, the structure and the educational culture of the curriculum
5. To identify, assess and describe new practices on competence-based teaching to achieve the desired competences indicated in points (1) to (4) at all levels. This implies the implementation of teaching methods and creative teaching in a renewed curriculum. It is expected that a specific space for knowledge, reflection and transference of creative and innovative experiences in the teaching of ADU, will be generated promoting qualitative innovation.
6. To involve associates (professional bodies, local governments, local stakeholders, experts in the field of architecture, design and urbanism and urban development, HEI's of other countries and periphery regions) to attend some of the actions and use their expertise to help to achieve the aims of this proposal, promote regional integration, social cohesion and dissemination, thus increasing the sustainability of the project.
7. To make concrete propositions to update, modernize and synchronize university curricula in architecture, design and urban planning, creating sustainable links between the HEIs of LA and Europe.
8. To disseminate the results to other HEIs, local governments and professional bodies in the region.

We believe that this will allow setting a more structured Common Higher Education Area in the region based on the process of regional integration.

⁵ Previous ALFA-projects in the field: Crossroads in Architecture (2005-2008); Proyecto Tuning América Latina 2004-2008, Tuning America Latina 2011-2013, ENHSA/LA—Creating Competences Based Architectural Curricula for Transparency, Quality and Mobility.

1.6. Relevance of the action

During the last years Latin America (LA) and Europe (EC) have suffered a complex social, economic and spatial process that imposes new expectations and demands on the built environment field. Cities in Europe are transforming into a post-industrial landscape that present acute economic and social challenges for designers and planners who are continuously confronted with the redevelopment, regeneration and renewal of the existing urban fabric. In LA the rapid urbanization process has changed the environment and the lives of most inhabitants. Although in general terms the urbanization process brings better education, health, and access to culture and facilities to the population involved, in LA cities it has not always been the case. Most LA cities have grown inorganically, creating vast areas with insufficient urban services and equipment, while many of their central areas have suffered from abandonment and decay. The process has left a footprint of physical, economic and social problems which will take years to improve and turn into a proper and enriching urban fabric. On the other hand, technological development has arrived to many of LA's major cities – intelligent buildings, communication networks, sophisticated infrastructure – creating isolated areas of prosperity and development. At the same time the region has been affected by a string of natural disasters – earthquakes, tsunamis, volcanoes and tornados – and instability (displaced communities) that have damaged many urban areas forcing quick responses from the authorities and professionals. This situation imposes new demands and expectations on the professionals in the field and thus in the Higher Education Institutes (HEIs) involved with the built environment: the Schools of **Architecture, Design and Urbanism** (abbreviated as **ADU**)

One of the ways in which the traditional HEIs of LA in ADU have responded to these challenges, is by encouraging their schools to carry out their studios and courses on real and relevant world problems. However, this strategy has yet not been able to provide students with the methodological and theoretical tools necessary to intervene the built environment in a comprehensive manner. As a result, the ADU disciplines have lost presence in the professional world and among public bodies, leaving the field with little direction and subject to the result of market forces, political decisions or emergency actions.

In this complex setting plagued by poverty, inequality, low social sustainability and emergencies with a strong technological development at arm's length, there is a need to rethink the traditional built environment field on a human base, and understand it as an *expanded field*. That is, not only the ADU professionals' field, but also one where many disciplines converge and have to interact: architecture, urban planning, transport planning and engineering, urban geography, design, landscape architecture, anthropology, governmental issues and others. We believe that a new generation of ADU professionals is needed where *critical thinking*, together with *creative design*, *sustainable articulation* and *trans-disciplinarity* are essential.

The required skills and competences in the education of architects, designers and urban planners, which are crucial, have a specific complexity⁶. Architecture, design and urbanism have a complex engagement with the world. They require to deal with a broad range of disciplinary and practical forms of knowledge, both as disciplines and professions. In the last years it has become clear that to be more responsive to the changing societal and professional needs, it is necessary to go beyond *object-oriented* knowledge production towards *system-oriented* approach and insight. Here the act of *creative design* becomes especially important because it holds competences that bring together (in a synthesis-way) different and very varied aspects, questions and demands. Design is seen by more and more in the educational and scientific world as an important innovative competence to, at the one hand, investigate complex interdisciplinary issues and, at the other, synthesize solutions from it.

Another important specificity of the ADU disciplines is that, unlike the hard sciences, they both shape and reflect the very specific regional characteristics in which they are practiced (climate, social conditions, cultural roots, seismic activity, landscape, urban context, hydrology, topology). Thus the formation of these professionals for the 21st century needs to consider the global knowledge of specific and necessary subject-related skills, but also include some common and regional specific competences that will allow them to respond to society's changing needs in the local built environment appropriately. In this context, it is essential for HEIs to establish strong partnerships with on the one hand 'each other' to create a common vision, and on the other hand with 'public authorities and professional bodies', in order to provide valid responses to answer these challenges and to ensure an appropriate formation in lieu of future employability. The training of ADU professionals is been currently questioned within the HEIs, but there is no consensus about new curriculum directions and the refined particular competences that these new professionals should have.

⁶ Hirsh Hadorn (2008), *Handbook of Transdisciplinary Research*; Doucet I. & Janssens N. (2011) *Transdisciplinary Knowledge Production in Architecture and Urbanism*; Spiridonides C. & Voyatzaki M. (2010) Educating architects towards innovative architecture.

In the contemporary globalized world there is a real need for a better intercultural understanding of global and local parameters. It is eminent and mutually beneficial, to establish a bridge between EC and LA HEIs, creating synergy and facilitating research, professional mobility and collaboration towards lasting educational and professional cooperation between both continents. HEIs have to approach this issue collectively and develop an effective academic dialogue for this purpose, which will permit us to understand the others and consequently ourselves better.

In the last years important steps have been taken in this direction through previous Alfa Projects: (i) the *ALFA-program Crossroads in Architecture*, (ii) the *Tuning Project-LA* and (iii) the *ENHSA/LA–Project*⁷.

- The present proposal is a direct sequence of the *ALFA-Program Crossroads in Architecture*. Through the experience of the staff mobility, conferences and joint workshops carried out in this program (with seven members present in this consortium: Argentina, Belgium, Brazil, Chile, Cuba, Spain and UK) came the broader issue on the relation between teaching, research, and the formulation of the curriculum in line with the challenges of the new millenium.
- The *ALFA Tuning Latin America Project* (2004-2008) and (2011-2013) seeked 'to fine-tune the educational structures that exist in LA, initiating a debate whose aim is to identify and improve co-operation between HEIs, so as to develop excellence, effectiveness, and transparency', of which Architecture was one of the thematic areas. The aim was to develop professional profiles, transparency of educational structures, exchange information related to the development of curricula and convergence between HEI's. The results of this project stressed the importance of competence learning and identified 30 subject specific competences in Architecture. Five members of the LA tuning group are also members of this consortium (Brazil, Cuba, Greece, Guatemala and Panama).
- The ENHSA/LA Project, *Creating Competences Based Architectural Curricula for Transparency, Quality and Mobility* (2009-10)⁸ aimed to contribute to the enhancement of the quality of architectural studies in Europe. In this EU/LA project the following objectives were considered: to establish links, communication channels and partnerships between HEIs' in ADU of LA and EC; the collaboration on the further development and implementation of a competences-based architectural education; collaboration on pedagogical strategies, teaching practices and methods conducted by a number of predefined expected outcomes described in terms of competences; developing together common reference points and detailed descriptors about the achievement of the competences as learning outcomes of the educational practice; and, elaboration of teaching practices that assure the presence of competences related to the research in architecture. Four members of this project are involved in this proposal as members. (Brazil, Greece, Panama and Peru)

The former projects pinpointed new challenges for the education of designers in the 21st century⁹:

- further defining of competences in relation to regional needs
- identifying actions to move towards competence-based education
- developing new performance competence-based educational techniques and strategies in relation to the specific global/local context
- the need to consolidate and extend the regional academic theme networks, in order to achieve a real space of convergence in the area of Architecture, Design and Urban Studies. This will ensure channels of academic/student integration, cooperation and exchange

It is important that precisely now, at a time when EC-HEI's are still in a curriculum development and LA HEIs are at the start of a curricula renewal considering the challenges ahead, an academic interchange consortium between EC and LA HEIs is created, such as the one we are proposing here, with the ambition to restructure Higher Education for the 21st century in the Expanded Field of Architecture, Design and Urbanism. This proposal takes the results of those projects in a 'next step' and wants to give an answer to the future challenges as described in the report of the Tuning project as follows:

- A. Identification of renewed professional areas for the 21st century in a regional LA context, giving special attention to the aspect of creative design and trans-disciplinary thinking as essential facets of the education in ADU. A further defining and refinement is made of the common and regional specific competencies in relation to global and local needs, as well as in defining, describing and identifying indicators for the implementation of a renewed curricula.

⁷ ENHSA/LA–Creating Competences Based Architectural Curricula for Transparency, Quality and Mobility. (EHNSA = European Network of Heads of Schools of Architecture; an initiative of Heads and academic programme coordinators of 77 European Schools of Architecture to contribute to the definition, shaping and establishment of the European Higher Architectural Education Area).

⁸ Prof. Constantin Spiridonidis of Aristotle University of Thessaloniki (which is one of the partner of this consortium) was the coordinator of the project *ENHSA/LA–Project*.

⁹ Report LA tuning p. 82-102, 2004. Reflections on and outlook for higher education in Latin America, 2008, pp.82-101 (EAAE = European Association of Architectural Education).

- B. SWOT analysis of existing partners. Testing the existing curricula of all partners in function of the description of common and regional specific competences and course-content in relation to the results of the LA-Tuning Project.
- C. Developing, describing and testing innovative educational techniques and strategies on competence-based teaching, life-long learning, interactive teaching, distant learning, digital learning platforms. Most partners have a history of pilot innovative experiences which need to be shared and valued.
- D. The previous tasks (A, B and C) will define and identify points of reference for quality improvement. In that way we investigate the role of learning, teaching, assessment and performance in relation to quality assurance and evaluation of the curriculum within the difficulties of research and education and the description of the final competences the student has to achieve. A rich and productive synchronization can be achieved by developing methods and strategies for quality improvement in the design-courses in relation to innovative teaching practices and the creation of common academic standards.
- E. To involve associates (professional bodies, local governments, local stakeholders, experts in the field of architecture, design and urbanism and urban development, HEI's of other countries and periphery regions) to identify the renewed professional areas and refine the competences in order to increase regional integration, social cohesion and the employability of ADU graduates.

This proposal is an essential addition to the existing ALFA tuning and the ARCHI-Mundus project. While the existing ALFA tuning and the ARCHI-Mundus project are working on the Higher Education in general, the data-collection and creation of the qualifications frameworks for each subject area (in this case Architecture) and create an international debate on the quality of Architectural education, this project goes further by (1) expanding the subject area of architecture with design and urbanism to ADU and related fields; (2) redefining common and regional specific competences (while the ALFA tuning project is mainly focusing on common competences) (3) investigating and testing the relation between the detected competences and the curricula development (4) identifying renewed professional areas (5) defining, describing and identifying indicators for creative-design and trans-disciplinary thinking (6) investigating and testing qualities in teaching and practicing ADU. In other words this project does not only want to describe but also to test how the competences can be achieved by new educational techniques. This will allow the development of a full curriculum with guidelines and strategies

In close contact with the *LA tuning project*, *ARCHI-MUNDUS: Building up Quality in Architectural Education*, other HEI's and associates, we aim at making concrete propositions to update, modernize and synchronize university curricula in architecture, design and urban planning, creating sustainable links between the HEI's of LA and Europe. The proposals in the final report -with a thorough dissemination- will give all HEI's in ADU of LA strategies to develop their curricula in function of the development of the higher education, creating regional integration and social cohesion as well as a common higher education area in LA. The proposal fits in the general and specific objectives of the ALFA-call of improving the quality, relevance of the Higher Education in LA, stimulating a more balanced, and equitable socio-economic development in the region.

The *direct target groups* of this project are the 18 partner HEI's that will have strategies and a handbook of best practices on competence based learning in ADU in a LA-context, and by this the several hundreds of academic staff-members and several thousands of students of the HEIs involved, which will gain from the direct experience of participating in the activities and from the curricula improvements. They will also be better prepared to operate in an intercultural, social and economic environment of architecture, design or urbanism. In second place other LA/EU HEIs and associates, that will be invited to participate in workshops, seminars and conferences, will also benefit. Through a well defined and thorough dissemination, the partners, the associates, the members of the LA tuning projects of the LANHSA (Latin America Network of the Heads of Schools in Architecture) as well as other LA HEI's in ADU will have the possibility to profit from the results of this project. An attractive and relevant curricula in relation to concepts of widening access and lifelong learning will be developed, promoting a a flexible and creative learning environment that considers a diversified student population. A transparent educational system within universities is promoted and allows for comparisons and transparency in the credits system. At the same time, this generates the explicit need for a permanent quality assessment and control (see the Bologna Process). Also, *other LA HEI's with related topics and disciplines* such as landscape design, urban geography, transport planning and engineering, sociology, anthropology, ecology will benefit from the description of common elements within the trans-disciplinary competences and best practices designed to achieve them. The *final beneficiaries* of the project will be the *urban citizens and local governments*, who will see their quality of life improved by inhabiting better and more efficient buildings and cities.

1.7. Description of the action and its effectiveness

1.7.1. Expected Results

(i) A Memory of Understanding (MOU), as a multilateral agreement is signed by all 18 partners, at the end of the project. In this MOU the following is stated:

- the intention of the partner to promote the propositions to restructure and synchronize the university curricula for the 21st century in the Expanded Field of Architecture, Design and Urbanism in line with the European approach and as a function of the detected new challenges and strategies
- the intention to give information and share the rationality of the propositions with the other HEI's in the country and towards the educational authorities at national level.
- the intention to promote the propositions among other LA HEI's.

(ii) A multilateral agreement (signed document) at the end of the project, by all the partners, for further future cooperation and monitoring, in interaction with the associates and other HEIs and professional bodies.

(iii) A publication (ca 620 pages in Spanish and English). The book will be sent to all Departments of ADU of Latin America and through the EAAE to EC HEI's for a European dissemination and discussion. Also an e-version will be put on line. By this a multiplier effect is achieved. The book will have the following structure:

- Introduction: Framework of the project, the problem-settings, its aims, aspirations and ambitions, and description of the partners (ca. 20 p.).
- Chapter 1: Identification of renewed professional areas for the 21st century in a regional context in relation to common, regional specific and trans-disciplinary competences and indicators (ca 100 pages)
- Chapter 2: A description of the common and regional specific competences and their relation to the curricula, and the description and illustration of the trans-disciplinary competences and creative design thinking, and the indicators to implement them in a renewed curricula. (ca 100 pages)
- Chapter 3: New practices on competence-based teaching as a function of the new challenges. A handbook of 'best practices' on competence-based learning in a design context, to help the change towards competence learning education, with guidelines to implement them in a renewed curricula Results of the workshops and pilot projects. (ca 300 pages)
- Chapter 4: Final conclusions and recommendation. Propositions and strategies to update, modernize, restructure and synchronize the university curricula for the 21st century in the Field of Architecture, Design and Urbanism (ca 100 pages)

(iv) An interactive website (Spanish/English). For disseminating the experiences and ongoing discussion a website is built available to all partner and associates of the project, and in a second step beyond the group to a wider university audience within Latin America and Europe. The experiences, results and innovations will be put on the website. This will disseminate the results towards a full international community, especially the Latin American and European Schools of Architecture, Planning and Design. A website forum will increase the program's impact and it will give a greater visibility. An open forum will stimulate an ongoing discussion on the topic, creating a multiplier effect. The website will be linked with the websites of the partners, giving the material visibility and assuring an extended dissemination of its contents.

(v) Papers in journals and presentations at conferences on the project and the results. The partners will explain the results of the project at conference on ADU education over the world and will publish papers and indexed (refereed) journals.

1.7.2. Gains and Profits

There is a long tradition of interlinkage between Latin American and Europe ADU education systems. While LA's HEIs are at the moment interested in the reforms, new orientations and contents of the educational system in Europe, European HEI's are deeply interested in the challenges in architecture, urbanism and design that the LA continent is presenting in its path to development. It is in both the European and the LA interest to keep the educational systems as compatible as possible to facilitate links of collaboration and exchange at educational and professional level. The Bologna process and the creation of the European Higher Education Area stimulated the interest of the Latin American Schools of Architecture, Planning and

Design to investigate if in the new regime traditional compatibility can still exist. The results will offer essential insights into the reform process within the academic standards logic followed by both sides (LA and EC).

Through this three year project, concrete propositions and guidelines to update, modernize and synchronize university curricula in architecture, design and urban planning are being produced, creating sustainable links between the HEI's of LA and Europe. The final reports and documents produced during the three years intensive work – with a thorough dissemination – will give all HEI's in ADU of LA strategies to improve their curricula in function of the development of higher education, creating regional integration and social cohesion, helping towards the creation of a common higher education area in LA. The proposal fits in the general and specific objectives of the ALFA-call of improving the quality, relevance of the Higher Education in LA, stimulating a more balanced and equitable socio-economic development in the region. In the internationalised economy of our times, the competition of markets is directly translated into competition of competences corresponding to the degrees delivered by HEIs. This is the reason why quality remains in the centre of, the strategic planning of the schools of ADU, and also the reason why the question of quality has to be investigated collectively in order to assure better results in the responsible education of professionals of the built environment.

The project can be placed in a strategy of synchronizing curricula between the partner universities and in line with the challenges of the new millenium. The final material results of the project are the signed agreements, publications and website, where the different aspects of **The restructuring of Higher Education for the 21st century in the Expanded Field of Architecture, Design and Urbanism** will be disseminated; nevertheless the experience of the 18 partners of having been in close contact, sharing experiences and discussions, will probably have a multiplier effect well beyond the direct results.

From the testing of the existing curricula of all 18 partners (over LA and EU) in function of the description of common and regional specific competences and course-content of the HEIs in the consortium in relation to the results of the LA-Tuning Project following results will be visible

- A broader vision on the relation between the existing curricula and the competences formulated in de LA tuning project. By this a refinement is formulated.
- The existing voids in the present curricula will be identified
- A description of the common competences versus the regional specific competences

From the description of renewed professional areas for the 21st century in a regional context, (18 partners and 13 associates) and the description of creative design and trans-disciplinary thinking as essential aspects of the education in ADU a catalogue is made of extra and more refined common and regional specific competencies in relation to global and local needs.

From the description and testing of educational techniques and strategies (new practices on competence-based teaching, life-long learning, interactive teaching, distant learning, digital learning platforms) a set of best practices will be identified. A specific space for knowledge, reflection and transference of creative and innovative experience is described. This will also allow the creation of points of references for quality management.

Through the catalogue of the common and regional competences, the description of best and accurate practices in competence based educational techniques and the identification of indicators for their implementation in a renewed curriculum, a set of harmonized common academic quality standards are defined. This will contribute to the validation of accreditation as an important issue for high quality education.

The different detected facets ('description of renewed professional areas' for the 21st century in a regional context, the refining of the 'common and regional specific competences' and their relation to the curricula, and the description and illustration of the 'trans-disciplinary competences' and 'creative design thinking', the 'indicators' and 'the description of accurate practices on competence-based teaching') will be used as fertile practices to modernize higher education teaching and enhance quality.

The teaching strategies and the academic context, in function of the described renewed professional areas for the 21st century in a regional context, and the common and regional specific competences, are the most important issues at stake. From that – as both the starting point and the leitmotiv – a further positive influence on the composition and quality of curricula will occur. It is a motor for innovative, more dynamic and more up to date education, curriculum structure and complementary practices on teaching innovations. A curricula policy will be derived.

Why focusing on teaching strategies in different areas?

Educating architects, designers and urban planners for a changing future and a new context forces HEIs to redefine their educational strategies, to reformulate their curricula, pursue competences and to adapt their social role and mission. The student has to be specialized, but also flexible enough to adapt to the constant new demands of the field. This makes the need to develop transversal and general competences specially important. Thus, the relevance of innovative teaching strategies for appropriate qualitative design in close relationship with the course, research content and teaching methods: life-long learning, cooperative learning techniques, interactive teaching, distant learning, digital learning platforms, and so on. The permanent demand for a high quality education and the search to improve that quality is therefore evident, as is the need to define and identify points of reference for quality improvement to describe the different elements of the curriculum.

In that way we investigate the role of learning, teaching, assessment and performance in relation to quality assurance and evaluation of the curriculum within the difficulties of research/education and the description of the final competences that the student has to achieve. The discussion between research and education is considered today by the academic world as very important not only for all academic programs, but especially within the development of an education for architects. The new context of the higher education in the world asks for new methods in the relation teaching/research, like the involvement of students in research, increased interaction between the different courses, stress on solving capacities within different situations. The importance of this is demonstrated through the abundant current academic publications on the subject.

There is a considerable and undeniable benefit hidden within the cross fertilisation between research and teaching. It promotes:

- knowledge generation in the ability to develop competences and generate new design strategies.
- knowledge generation in the development of transversal and general competences.
- innovative, dynamic and up to date education and research.
- creative thinking and multiple forms of disciplinary thinking.
- innovation in the content and structure of the curriculum on Architecture, Design and Urban Studies
- the identification of points of reference for generic and subject-specific competences.
- the development of multi, inter and transdisciplinary research and research by design

The final handbook produced through this project will help the management of 18 LA-HEI's strategic plan for quality management and control to update, modernize, restructure and synchronize the university curricula for the 21st century in the field of Architecture, Design and Urbanism. It will help the several hundreds academic staff with a list of competences and a strategic plan for comparison of practices for quality evaluation to implement the renewals in a practical way. It will help several thousand students in function of the demands of an (ever) changing international world, improving the future employability of their graduates and the quality of life of the urban and rural population in a sustainable way, especially the traditionally excluded urban poor. They will also be better prepared to operate in an intercultural, social and economic environment of architecture, design or urbanism.

The proposals in the final report – with a thorough dissemination – will give all HEI's in ADU of LA strategies to develop their curricula in function of the development of the higher education, creating regional integration and social cohesion and it will help towards the creation of a common higher education area in LA. By this they can provide attractive and relevant curricula in relation to concepts of widening access and lifelong learning, diversified student population and promote a flexible and creative learning environment.

Finally other LA HEI's with related topics and disciplines such as landscape design, urban geography, transport planning and engineering, sociology, anthropology, ecology and also other educational Master programs, will benefit from the description of common elements within the trans-disciplinary competences and best practices designed to achieve them. The final beneficiaries of the project will be the urban citizens and local governments, who will see their quality of life improved by inhabiting better and more efficient buildings and cities.

1.7.3. Proposed activities and their effectiveness

The project is structured by half-yearly network meetings and yearly conferences. Future actions are prepared, past actions are assessed, strategies developed, in order to guarantee results and full coherence of the projects. The main discussion takes place here in function of the goals of the project.

The SWOT, Pilot Projects and Workshops are essential, not only because they will capture the data and the information, but also because they are the testplace for achieving the competences through new educational techniques. They will effectively check the relation between the detected competences and the curricula development. Two elements are here important: the number of test-actions (they must be numerous enough) and the iterative method (to define, to test, to asses, to re-test, to re-asses, and so on) to create usable results. The process will lead to the formulation of guidelines and strategies to be presented in the intermediate reports and will be open for discussion in the annual conferences with all partners and associates. The conclusions will involve a publication with guidelines and strategies to update, modernize, restructure and synchronize the university curricula for the 21st century in the Field of Architecture, Design and Urbanism.

To manage the project six workteams are created. Each workteam is managed by one coordinator and is made responsible of a specific objective. They will also be responsible of producing preparatory material before the different activities. Every partner participates in two working teams.

The project can be described through the following six actions or activities

Action 1: Seven Network Meetings (S1, 2, 3, 4, 5, 5 & 6)

In order to guarantee results and full coherence of the project, seven Consortium Network Meetings are planned to manage the project. These Network Meetings will be an important instrument to keep the active communication within the Consortium. The preparation of each Network Meeting will be lead by the two lead-coordinators, LA & EC, and the host-to-be partner. Agenda and clear meeting program (goals, working-system, actions, action-takers, deadline, status, documents to be presented) will be send to all participants previously of the actual meeting.

In these Network Meetings the workteams present their intermediate results, and an internal discussion on them will take place. Future actions are prepared, past actions are assessed, strategies developed. All partners are active participants. A report is produced after each Network Meeting.

Action 2: SWOT Analysis of Existing Partners' Programmes (S1, 2 & 3)

It is important to map and test the existing programs' curricula of all 18 partners through SWOT analysis on competences, process, content and results. This is done in relation to the results of the LA-Tuning project, the ARCHI-mundus project, and the needs of the professional field. By this a matrix is achieved depending of changes towards a renewed curricula development.

This action gives us not only a broader vision on the relation between the existing curricula and the competences formulated in the LA tuning project but also its results allow us to formulate new defined and refined common and regional specific competencies. The aspects of creative design and trans-disciplinary thinking, in accordance with the needs detected by public authorities and professional bodies, will be specially considered. By this a refinement is formulated on the competences in relation towards a renewed curricula. The lacks and shortcoming's that are occurring will be described. There will be a view on the common competences versus the regional specific competences.

The 18 SWOT analysis will be carried out by 3 groups, with five observers per group. Each group will perform a SWOT analysis of 6 partners. The group is guided by Workteam 4 (see further) and has a practical assistance allocated by the project. It is important that the analysis is performed 'in situ' to complement the data collecting of the partner itself. In situ visits are essential to achieve a clear view of the curricula and especially of its implementation (structure of the curriculum versus content of the courses, teaching systems, the attainment targets, qualifications, masterthesis). In situ visit also allows for an overview of the facilities, the student results, and gives the possibility to talk to the local academic staff, academic management, students and local bodies.

Special attention is given to the Masterthesis. As the master thesis is seen as the final (synthesis) achievement of the academic curriculum it sets the standard to the Diploma and the start of the profession. It is important to define the standards to be fulfilled; definition of good practices; the thesis structure and culture, analysis of strengths and weaknesses; what to include in a diploma thesis; analysis of the process of the master thesis, interactions and cross references; markings and feedback systems, possibilities of different techniques. The definition of standards and competences to be achieved in the final master-thesis has its impact on the total curriculum: it is often 1/4th of the amount of credits of the master education. Different HEI's like Chalmers Technical University of Sweden (one of our partners) has a yearly assessment of the masterthesis by external academic assessors.

Method of the SWOT: (1) establish a Workteam for this objective supported by an assistant (2) A SWOT analysis format (3) an in situ visit of the campus, the teaching facilities, the educational methods, participation to a design-evaluation moment (4) discussion with academic management, academic staff and students. (5) interview with associates (6) intermediate report (7) conference and network meetings (8) final report.

Step 1: Preparatory activity: the making of a template-document in function of the SWOT analysis—using the parameters agreed in the LA-Tuning project. A format for assessment and a matrix for comparison needs to be made by the Workteam screening the suggested competences by the LA tuning project for the discipline of Architecture and translating it towards the discipline of Design and Urbanism.

Step 2: SWOT analysis of the existing programs ADU regarding the results of the LA tuning projects matrix A and discussion.

Step 3: SWOT analysis of the existing programs ADU regarding the results of the new defined common and regional specific competencies as result if the identified renewed professional areas for the 21st century in a regional LA context and the aspects of creative design and trans-disciplinary thinking, in accordance with the needs detected by public authorities and professional bodies. Matrix B and discussion in the Network Meeting and Conference.

Step 4: Conclusions toward a renewed curriculum: guidelines with strategies to modernize the existing curricula in function of the results of the total project.

Action 3: Six Pilot Projects and Three Design Workshops

Six Pilot Projects are proposed to refine and specify the detected 'common' and 'regional specific', and 'trans-disciplinary' competences in relation to the renewed professional areas. Here we will also test the new teaching methods in lieu of the objectives of the project. All partners are active in the teaching or in observing to record, discuss, confront and compare the used methods and their effectiveness. Participation of the local government and professional bodies is essential. After each action a report and matrix will be made about the specific objectives (2) to (5) as a function of curricula development. The results will be presented by the Workteam at the conferences and discussed in plenum. From this, guidelines for teaching and best practice will be distilled.

Six Pilot Projects (lasting one semester each). (S1, 2 & 3) Each pilot project consists of 6 partner HEIs. They will initiate in parallel a Design Studio (6 sub-projects) of one semester on a **common issue but on different locations**. Here a global problem is tackled on a local scale having trans-disciplinary involvement with local students, associates and a target population. In these parallel design studios, collaborative design will be used through a common issue, e-learning and blended learning. The differences in local and regional practices and regional specific elements can be distilled. The pilot-projects work for a full semester through **e-learning** in close contact with the partners in the Pilot Project.

Each partner of the consortium participates in 2 pilot projects ($18 \times 2 = 36$): 6 pilot projects, each with 6 partners directly involved are considered ($6 \times 6 = 36$). The results are presented before the full consortium for discussion. Although some topics might change subject to the previous results and development of the project, the topics and common issues considered for the pilot-projects are:

Pilot Project 1: urban growth and sprawl

Pilot Project 2: urban development and economy

Pilot Project 3: social housing and displacement

Pilot Project 4: sustainable development for the urban poor

Pilot Project 5: community buildings

Pilot Project 6: public space.

The aim of this activity through the use of the common issues is to define (and refine) new common and regional specific competences in relation to global and local needs; to detect competences on creative design; to detect extra renewed professional areas for the 21st century through transdisciplinary approach; to induce through e-learning and blended learning new educational techniques; and to develop and test new educational techniques in function of competence based education.

Every pilot project uses a template that will be used to guide the activity, detect and note the different aims and to assess them. The different templates will be confronted to each other to extract results and guidelines. The Workteams 1, 2, 3 & 5 are responsible for organizing and carrying out the Pilot Projects.

- Step 1: Template made by the Workteams 1, 2, 3 & 5 and consortium in Network Meeting 1 to guide the activity, detect and note the different aims and to assess them
- Step 2: Determination of the common issue and the local parameters. This is done by the 6 participating partners. Setting up of an e-learn platform
- Step 3: Launching of the Pilot Project in the design studio at the partner institutions
- Step 4: Midterm evaluation and steering of the project. The pilot project is steered in function of the detected local academic and cultural identity in a full mutual open discussion between the partners of the Pilot Project, the team-members of the Working Team and the academics and students of the hosting University.
- Step 5: Final evaluation of the activity. Analysing of all the parallel projects. Comparison of the outcomes and experiences of the 6 partners. Template to be filled in by the 6 partners.
- Step 6: Assessment by the local staff members and the students with a digital questionnaire.
- Step 7: Report by Workteam.
- Step 8: Presentation of the report at the Network Meeting and the Conferences. Basis for the next activities to refine the results and the final conclusions.

Each partner is responsible for the activities planned in his own school as well as the selection of the teaching staff. A format for assessment and a matrix for comparison will be made by the Workteams and approved by the consortium.

Action 4: Three Design Workshops

The three design workshops (S2, 4 & 5) are also proposed to refine and specify the detected 'common' and 'regional specific', and 'trans-disciplinary' competences in relation to the renewed professional areas. Here we will also test new teaching methods, and we will incentivize the participation of local governments and professional bodies of the host country. After each action a report and matrix will be made about the specific objectives (2) to (5) as a function of curricula development. The results will be presented by the Workteam at the conferences and discussed in plenum. From this, guidelines for teaching and best practice will be distilled.

The three Intensive Design Workshops of 10 days each, consider students and visiting professors of all partners who will interact in a design-studio methodology on a precisely defined common issue and urban site. While in the Pilot Projects students work for a full semester through e-learning here at the intensive design workshop students are confronted face-to-face by teachers and students of different countries, backgrounds and teaching methodologies for a short period.

On these occasions, the design methodology is tested in an interactive way in the presence of a diversity of international students and staff. The students are divided in smaller groups with two or three guiding tutors of different countries. Within those small groups comparative design research is performed. The participating professors give lectures on the related topic. In this way the student can see how design- and research questions and methodologies are tackled in the different countries. Very important is the fact that students are guided by an interdisciplinary and intercultural team of lecturers. Interdisciplinary and intercultural thinking is induced. Here in presence of all partners the design/research problems will be tested by students (local and international) of the host university. The workshop is also used as a tester and initiating pilot-project under the supervision of all partners. The frameworks of the workshop, the topic and testing aspects will be determined in advance by the consortium so that a good preparation can be made. Trans-disciplinary involvement with local stakeholders and professional bodies, and a target population is essential. In each workshop new ways of teaching will be implemented.

All partners participate actively in the Design Workshop: Number of professors present 18 partners x 2 professors, local actors, 60 local and international student that are present at the university at that time. The results are presented before the full consortium for discussion. Although some topics might change subject to the previous results and development of the project, the topics and common issues considered for the Design Workshops are:

- Workshop 1: New professional area in urban space and scale
- Workshop 2: Creative design thinking, trans-disciplinary thinking and social sustainability.
- Workshop 3: Transforming existing urban fabric and architecture for the future. Common and regional specific competences.

A preliminary time- framework of the Design Workshop as follows:

- Day 1: Arrival of the participants. Evening lecture: Introduction, dedicated to clarify some of the difficulties and challenges in HEIs curricula.
- Day 2: The state of the art. Different presentation of the cases to an academic audience of teachers and researchers. Discussion and dissemination of experiences to aim to innovate in education. Work moments for academic analysis and discussion. Critical examination of the role of research in the field of architectural teaching to clarify contributions and shortcomings as well as connections to specific academic environments within the specific regions and countries. Identifying points of reference and defining strategies for implementation Pilot Projects.
- Day 3-8: Workshop development with local students and staff from all participating partner universities. Presentation of the workshop design and research problem. Lectures by staff members of the network on related topics of the workshop design and research problem based on their local experience in their home university. Visits to the sites where the design problem is situated. Student Workshop organisation in working interdisciplinary groups¹⁰. Follow up workshop and technical visit to the local architecture and urban culture (public housing, public space, local problematic on architecture, design and urbanism); to exploit the local issues of architecture, design and urbanism in relation to other regions and continents.
- Day 9: Assessment by a jury of the student workshop. Final Presentation of the conclusions, possibilities and difficulties to test some of the best practices. Defining final strategies and scenarios to implement the Pilot Projects. Conclusion of the workshop.
- Day 10: Leaving to the home institution.

Every design workshop uses a template that will be used to guide the activity, detect and note the different aims and to assess them. The different templates will be confronted to each other to extract results and guidelines. The Workteams 1, 2, 3 & 5 are responsible for organizing and carrying out the Workshops.

- Step 1: Template made by the Workteams 1, 2, 3 & 5 and consortium in Network Meeting 1 to guide the activity, detect and note the different aims and to assess them.
- Step 2: Launching of the intensive Design Workshop in the design studio at the partner institutions
- Step 3: Final evaluation of the activity. Analysing of all the workshop. Comparison of the outcomes.
- Step 4: Assessment by the international staff members, present local associates and the students with a digital questionnaire.
- Step 5: Report by Workteam.
- Step 6: Presentation of the report at the Network Meeting and the Conferences. Basis for the next activities to refine the results and the final conclusions

Why a design focus in the Pilot Projects and Workshops?

Traditionally and internationally, the course in ADU where the different constituents meet is the '**design studio**'. One of the main group of competences in the field of Architecture, Design and Urbanism is the ability to *design* in an interdisciplinary approach and combine it with an academic attitude; design based upon the outcomes of preceding research, and using design to enhance, enrich, or do the research. The design studio is seen by all ADU disciplines as an interrelating activity; and it is often "half or more of the credits" of the master education, having direct impact on the other courses.

Integration of teaching and research in the ADU field implicitly means integration of design and research as a specific competence for students as well as staff. The competence of design forms a major part of the ADU education. The way and level of this integration is one of the important issues of academic design education, and to share the experience on method and integration of research and teaching will be an important outcome of the project. We intend to compare cases of do research by design or design by research, learn from each other for a better understanding of this particular research method: design as creative research.

Lastly it is important to signal that in a world where relevant problems – such as those in urban space – are not longer disciplinary but involve several specialists and fields; the methodology of the design

¹⁰ The ALFA network Crossroads in Architecture has already managed 3 student workshops: Sevilla 2006, Rio de Janeiro 2007 and Santiago de Chile 2008.

workshop offers an advantage in looking for answers not at individual levels but in well tuned interdisciplinary teams with an iterative approach. The competences detected, are points of reference for curriculum design and evaluation.

Action 5: Three Annual Conferences

Three Annual Conferences of 5 days each (S2, 4, 6), for academics, students, local governments and professionals in the field to discuss, test, evaluate and synthesise the results in terms of their usability in different academic environments and regional contexts. All partners are active participants.

Every Conference will be attended by

- Three members of each partner HEI (a coordinator of the project, an academic staff member and a member of the academic management staff). The involvement of academic management staff is an important link to the management level of the University. This guarantees a sustainable development for quality assurance for higher education within the curriculum of the education in ADU.
- The associates (extended to relevant guest of other HEI's of peripheral regions and less developed countries) to maximise participation on the results of the project.
- Local student representatives
- Local government officials will be invited

With this action we want to enforce the discussion aiming at a broader basis for specific objectives (1) to (6). (see above for the importance of the associates and guests). The topics planned for these Conferences are as follows:

- Conference Year 1: Renewed professional areas, and common, regional specific and trans-disciplinary competences and indicators (S2)
- Conference Year 2: New practices on competence-based teaching as a function of the new' challenges. A report will be made which will be amended by the consortium and stakeholders. (S4/5).
- Conference Year 3: Final conference. Propositions to update, modernize and synchronize the university curricula in ADU. A final conference will be organised where the project results will be discussed in an open forum. Two keynote specialist speakers will be invited. (S6).

In the conference we will use meetings ad plenum to bring the intermediate results, questions and answers, panel discussions, parallel thematic group breakouts, team presentations to develop on the different presented issues. The planned schedule considers: Day 1 arrival and evening meeting. Day 2, 3 and 4 conference activities. Day 5 conclusions and departure.

Action 6: Interactive discussion website

During the whole project an interactive discussion website will be active on the topic. The website is not only open for the consortium but also for other Schools or Departments of ADU in the EC and LA. The website will be used to disseminate experiences, critical analyses and discussion. The website will widely be available to Departments of Architecture of ADU. It aims at giving the program a bigger impact and greater visibility, it will partly be a closed site as a web forum for the consortium and partly an open site, beyond the group to a wider university audience within Latin America and Europe to innovate in education.

Action 7: Preliminary and final publication of results

Each semester a Working Document will be produced and published in the web. The production and edition of these first preliminary results of the project, to a first digital website publication, will be prepared by the Workteams, three assistants, the network coordinators, and an editorial board.

In a second phase this will be published as a book (as a final presentation of the whole program) in year 3. Full engagement of the partners and associates is important, as well as external evaluation of the quality of the detected results.

The sources are: Internal and external assessments, and formative and summative evaluations of the results of the actions and the formulated guidelines and strategies. Discussion in the conference by all

partners on the innovative practice and the relation to the pilot projects. Conclusions of the conferences. Reports on the academic management staff on the different actions.

A set of Final Publications will be prepared regarding: (i) the expanded field for the new millennium (ii) competences for the ADU professionals (iii) pedagogical methods for the formation of ADU professionals (iv) a final discussion on standards and common curricula for LA coherent with the EU. These results will be incentivised to be presented as papers in refereed journals.

The following chart describes the sequence of the actions throughout the project.

ACTIONS	YEAR 1												YEAR 2												YEAR 3												
	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	
1 7 Network Meetings																																					
NM1																																					
NM2																																					
NM3																																					
NM4																																					
NM5																																					
NM6																																					
NM7																																					
2 18 SWOT																																					
Group 1:																																					
Group 2:																																					
Group 3:																																					
3 6 Pilot Projects																																					
Pilot Project 1																																					
Pilot Project 2																																					
Pilot Project 3																																					
Pilot Project 4																																					
Pilot Project 5																																					
Pilot Project 6																																					
4 3 Workshops																																					
Workshop 1																																					
Workshop 2																																					
Workshop 3																																					
5 3 Conferences																																					
Conference 1																																					
Conference 2																																					
Conference 3																																					
6 Website																																					
Website																																					
7 Publication																																					
Papers																																					
Book																																					

1.8. Methodology

1.8.1. Prolongation of a previous action

This project is a direct consequence of the ALFA Program *Crossroads in Architecture (2005-2008)*. In that project there was not only student mobility but also staff mobility and joint design-workshops. The basis of this proposal saw in two ways light of the existing ALFA Program 'Crossroads in Architecture'.

- First: The staff mobility (in the Special research and teaching seminars and the design workshops) was seen as an essential element towards a close co-operation in education as well towards real integration. Through the direct experience of those former actions (seminars and joint workshops) the broader issue of the relation 'teaching' and the formulation of the 'curriculum' in the academic discussion in relation to the aspect of 'competences' emerged. The profile of the contemporary architect

is not any more an agreed one and its re-definition constitutes a central issue of all local and international professional associations, educational institutions and governmental bodies

- Second: Next to the student mobility and the staff mobility a pilot-project 'Master in Intercultural Architecture' was carried out. In this pilot project student were educated on the international aspects of architecture. The aspects of transdisciplinary competences and comparative studies were partly analysed. In a world where architects are not bound anymore by the frontiers of their own countries it is important to understand the cultural diversity and local identities of other regions and countries. It can introduce a richer understanding of the academic field and facilitate the practice of an architect abroad. In this close cooperation of the ALFA project, the problem of relation and connection of innovative teaching and research in the creation of a sustainable curriculum emerged several times.

1.8.2. Synergies with other initiatives, in particular from the European Union

In the last years important steps have been taken through other Alfa Projects, the *Tuning Project-LA* at the one hand and *ENHSA/LA—Creating Competences Based Architectural Curricula for Transparency, Quality and Mobility* at the other. The former projects pinpointed new challenges and working points for the education of designers in the 21st century that are tackled in this proposal. The present proposal takes the results of those projects to a next step and wants to give an answer to the future challenges as described in the report of the Tuning Project (see our objectives). The synergies with the projects is guaranteed by a full knowledge of the reports and the fact that several partners in the former project are also partners in this consortium. The relation between the recently approved ARCHI-Mundus-Building up Quality in Architectural Education (a prolongation of the ENHSA/LA—Project) is assured by the fact that 6 partners of our consortium are also partners in that project. The ARCHI-Mundus project is a smaller project with 4 meetings for discussion on quality in architectural education. The shared partners presence on those conference has an effect on two aspects: the results of their project will influence this project, and at the same time our results will be presented for discussion. By this a multiplier effect is created.

1.8.3. Methodology

(i) Composition of the consortium

Partners. The overall and specific objectives will be accomplished through the enlargement of an existing solid working Alfa consortium to 18 HEIs (5 EC and 13 LA partners). The choice of the partners has been made by a strong rational: 7 partners (3 EC and 4 LA) partners have been an intense close working consortium since 2002 in 3 ALFA projects and bilateral agreements. The 9 new LA partners have been chosen in function of a strong and efficient consortium. The LA partners are broadly spread over LA so that difference in local and larger regions are present in the consortium. A broad diversity is important to cover the different issues raised in the problem setting. This broad consortium guarantees a multiplier effect. The total (global) in combination with the regional specific (local over Latin America) aspects can be grasped within the consortium. Five partners of the new consortium were active in the LA-Tuning Project (Brazil, Cuba, Greece, Guatemala and Panama) and four of them were active in the project *ENHSA/LA—Project- Creating Competences Based Architectural Curricula for Transparency, Quality and Mobility* (Brazil, Greece, Panama & Peru) and Brazil, Panama & Peru are members of the LANHSA (Latin American Network of Heads of Schools of Architecture). Three partners (Belgium, Greece and Sweden) are active members of the EAAE (European Associations of Architectural Education) and of the ENHSA (European Networks of Heads of Schools of Architecture). Six partners of our consortium are also partners of the recently granted smaller project ARCHI-MUNDUS- Building up Quality in Architectural Education (Greece, Belgium, Guatemala, Brazil, Panama and Peru). All partner have specific expertise and knowledge in specific aspects of the projects and want to achieve results.

Associates. Professional bodies, local governments, local stakeholders, experts in the field of architecture, design and urbanism and urban development, HEI's of other countries and periphery regions, are associates of the applicant to attend actively some of the actions and use their expertise to help to achieve the aims of this proposal. By this regional integration, the social cohesion and sustainability of the project and the dissemination is enforced. This collaboration is considered as a strong advantage of the project as it brings together different, but certainly complementary, approaches of the same issue. The associates participate active in the debates at the Conferences and integrate discussion groups for the intermediate results and suggested propositions. They act as a sounding board for a broad context (social, economic, regional, international, professional) and enrich by this the final report. The associates can

be divided in four main groups: professional bodies, local and international actors in local context, HEI associations, and other HEI's of particular countries.

- The professional bodies like the Colegio de Arquitectos del Ecuador, Asociacion Paraguaya de Arquitectos or the Colegio de Arquitectos de Chile, are important to create the connection of renewed curricula in relation to the actual professional field in Architecture, Design and Urbanism. They represent thousands of local architects and have a good understanding of the local professional and the future challenges.
- Local and international actors in local context is a diverse group like the Fundación Educacionista La Fraternidad, BUACAR S.A. Urban Research and Design Laboratory (U-Lab), Technische Universität Berlin, the Inter American Development Bank or the Ministerio de Educación de la Provincia de de San Luis, Argentina. Each are important to give feedback on specific aspects of local economic life, local investments, urban developments and aid programs.
- HEI-associations like the European Network of Heads of Schools in Architecture (ENHSA), the European Association of Architectural Education (EAAE), or the Latin American Unión de Escuelas y Facultades de Arquitectura de América Latina (UDEFAL/UDUAL and the Asociación de Facultades y Escuelas de Arquitectura Públicas del Mercosur (ARQUISUR) are important associates to interact with larger groups of HEI's and make secure that the suggested guidelines and strategies are commented and will be disseminated by them.
- HEI's like Escuela de Arquitectura de la Facultad de Artes y Humanidades de Universidad Nacional Autónoma de Honduras (UNAH) out of the lesser developed regions of LA are important so that the results can also be commented by them. In this way a bigger basis is achieved.

	Overview of Associates
Professional bodies	Colegio de Arquitectos del Ecuador. Asociacion Paraguaya de Arquitectos. Colegio de Arquitectos de Chile (CA).
Local governments, institutions related to urban and rural population in a sustainable approach	Fundación Educacionista La Fraternidad. BUACAR S.A. Urban Research and Design Laboratory (U-Lab), Technische Universität Berlin. Inter American Development Bank. Ministerio de Educación de la Provincia de de San Luis, Argentina.
HEI associations	European Network of Heads of Schools in Architecture, ENHSA. European Association of Architectural Education, EAAE. Unión de Escuelas y Facultades de Arquitectura de América Latina (UDEFAL/UDUAL) Asociación de Facultades y Escuelas de Arquitectura Públicas del Mercosur, ARQUISUR.
Other regions and peripheral zones	Escuela de Arquitectura de la Facultad de Artes y Humanidades de Universidad Nacional Autónoma de Honduras (UNAH) University in El Salvador University in Nicaragua

In a second phase 10 grants (flights and per diems) will be given to professors (academic management) of different LA HEI's to attend the conferences.

(ii) Organisational structure

For the project organisation several roles and groups with set tasks will be defined.

Project Managers: The lead coordinator of LA (Chile) and lead coordinator EC (Belgium) are the project managers of the project and steer the project.

Coordinators: Two coordinators per partner are appointed to be involved in the project. They are responsible for the relation of their University towards the projects. They coordinate on a local level the participation of the activities. They are a member of the Workteams and are present at the Network Meetings. Each partner during the preparation phase corresponding to each action will contribute to the relevant inquiries and will prepare a short presentation based on precise issues which will be common to all partners, and will structure the themes to be presented and discussed at each action. At the end of each Conference each partner will submit its eventually reviewed (after the debates) presentations and these will appear in the website of the programme.

Assistants: To assist the Project Managers part time assistants are hired. They will follow, prepare, process the different components towards the final publication of the results and recommendations. They are essential to follow up the project, prepare the different actions and organize the different components

and actions. Each assistant will be responsible for a defined set of components. Two of them will be stationed at the applicant (PUC, Chile), one of them at the EC-Coordinator (St Lucas Brussel). They will be guided by the coordinator of the PUC and St-Lucas. They will attend the different actions and help to manage them on a daily basis on behalf of the Consortium.

Workteams: To manage the project six Workteams are created with concrete responsibilities. The Workteams will allocate the appropriate specialized persons within their HEI's to run specific assessment procedures on particular aspects of the outcomes, such as: course presentations, questionnaires for local data collection, processing of the data and presentation. Each Workteam is managed by one coordinator and is made responsible of a different objective. Every partner participates in two Workteams. They will produce preparatory material before the different activities. The following chart describes the Workteams, the coordinator and partners involved.

		Chile	Belgium	Argentina	Bolivia	Brazil	Costa Rica	Colombia	Cuba	Ecuador	Greece	Guatemala	Panama	Paraguay	Peru	Spain	Sweden	UK	Venezuela
Team 1	New professional areas	■			■			■		■			■					■	
Team 2	Creative-design and trans-disciplinary thinking		■				■		■					■	■	■			
Team 3	Common and regional specific competences			■	■					■	■					■			■
Team 4	SWOT analysis of existing partners' programmes		■			■			■			■		■			■		
Team 5	New educational methods	■				■		■				■						■	■
Team 6	Update and synchronize university curricula in ADU			■			■				■		■		■		■		

■ coordinator of the group
 ■ member of the group

The preparation of the templates, the intermediate results and conclusions of the work teams are presented at the Network Meetings, the website and the Conference for discussion. From the discussion each Workteam makes the draft and a final report to be incorporated in the global report and publications. The work-teams will be responsible for the evaluation of the outcomes before their final dissemination.

(iii) Structure

The structure of the project is build through a system of interrelating actions to be assessed in a controlled and iterative way, that will produce intermediate and final results. The three year program is split into six periods of one semester (S1 to S6). The project uses the well-known system of critical questioning by spiral iteration (to define, to analyse, to test, to asses, to re-test, to re-asses).

It is structured by the half-yearly Network Meetings and the yearly Conferences. The Network Meetings ensure the coherence and strict follow up and development of the project. Future actions are prepared, past actions are assessed, strategies developed. The main discussion in function of the goals of the project, to guarantee results, takes place here. In the meetings common design issues, locations, teams are defined in function of the wanted results (analysis, planning, application, testing and evaluation).

The actions SWOT, Pilot Projects and Workshops are equivalent to the data collecting and testing of the findings of the project. After each combined-action (workshop, pilot project or swot analysis) the teams are following up the results and translate them in a report. The reports are presented and discussed on the consortium meetings and on the yearly conferences with other HEI's, local governments and professional bodies. From this step a next cycle of activities of design workshops and pilot projects and SWOT analysis are initiated.

The project is divided into different phases managed by the Workteams and supervised by the Lead Project managers, who also are in charge of the communication plan throughout the project. The task

within the Workingteams is split into phases: initiation, design, preparation, implementation, follow up, intermediate report and final report. Each work-team works with a detailed Gantt chart describing the tasks and dates. The responsibilities of the partners and the associates are defined by a RACI model. The decisions (milestones) are made at the network-meetings.

(iv) Internal and external evaluation

During the development of the project the partners will evaluate the overall running of the project and the development. This task will be carried out by the coordinator of each Wokteam. He/she will make all the necessary adjustments (in accordance with the other partners of the team, and the Lead Coordinators of the project) to the contents of the actions as well as to the proposed work plan. An evaluation report will accompany each phase. This report will follow different self-evaluation processes. For the preparatory phase, the Workteams will define some quality standards (discussed in the Network Meeting before a full consortium) against which to evaluate the preparation phase outcomes. The evaluation of the actions will be based on questionnaires distributed before the end of the action. In these questionnaires partners, associates and stakeholders will express their view on the development of the project and their proposals for its future development. The evaluation report for the preparatory phase will be presented for approval in the Network Meeting. In this way the extended participation of the partners will give the possibility to have a better consensus regarding the development of the project.

In the procedures for follow up and internal and external evaluation it is very important that the different aspects of the project (meetings, conferences, workshops and pilot projects) will be attended by academic staff, and academic management staff. Members of the academic management staff from the Department or University, as well as members of the pedagogical units of the universities can be invited. In the 3rd year assessment and discussions for the long term implementation, three external specialists will be invited. An external evaluator will work on the critical synthesis of the reports submitted during the development of the project as well as on the degree to which the objectives of the project have been fulfilled.

1.9. Duration and indicative action plan for implementing the action

The duration of the action will be <36> months.

LEGEND FOR TIME SCHEDULE CHART IN NEXT PAGE:	
PP	Pilot Project (1 semester or 14 weeks)
NM	Network Meeting (5 days)
SWOT	5 days per SWOT in each country
C	Conference (5 days)
W	Workshop (10 days)

Year 1								Semester 2						Semester 3						Semester 4						Semester 5						Semester 6						
	Activity	Month 1	Month 2	Month 3	Month 4	Month 5	Month 6	Month 7	Month 8	Month 9	Month 10	Month 11	Month 12	Month 13	Month 14	Month 15	Month 16	Month 17	Month 18	Month 19	Month 20	Month 21	Month 22	Month 23	Month 24	Month 25	Month 26	Month 27	Month 28	Month 29	Month 30	Month 31	Month 32	Month 33	Month 34	Month 35	Month 36	Implementing
	Preparation of the first Network Meeting																																					Applicant (Chile) & lead coordinator EC (Belgium)
NM1	Network Meeting 1																																					All partners
	Preparation of Pilot Projects by Workteams (1,2,3 & 5)																																					All partners organized in Workteams
	Preparation of SWOT exercise																																					Workteam 4
PP1	Pilot Project 1: Urban growth and sprawl																																					6 partners: to be determined at NM, staff and students
PP2	Pilot Project 2: Urban development and economy																																					6 partners: to be determined at NM, staff and students
SWOT1	SWOT part 1 on six partners: Argentina, Peru, Brazil, Costa Rica, Greece & Panama																																					Visiting Group: 5 partners
	Assesment of SWOT 1, preparation Network Meeting 2, intermediate report																																					Workteam 4
	Assesment of Pilot Projects 1 & 2, preparation Network Meeting 2, intermediate report																																					Workteams 1,2,3 & 5
	Interactive website																																					All partners
NM2	Network Meeting 2																																					All partners
W1	Workshop 1: Detected new professional areas																																					All partners, local students
	Assesment of Workshop 1																																					
PP3	Pilot Project 3: Social housing and displacement																																					6 partners: to be determined at NM, staff and students
PP4	Pilot Project 4: Sustainable development for the urban poor																																					6 partners: to be determined at NM, staff and students
SWOT2	SWOTpart 2 on six partners: Belgium, Chile, Cuba, Guatemala, Spain & UK																																					Visiting Group: 5 partners
	Assesment of SWOT 2, preparation Network Meeting 3, intermediate report																																					Workteam 4
	Assesment of Pilot Projects 3 & 4, preparation Network Meeting 3, intermediate report																																					Workteams 1,2,3 & 5
C1	Conference I: Renewed professional areas, and common regional specific and transdisciplinary competences and																																					All partners, associates and guests
	Assesment of Conference 1																																					
	Network Meeting 3																																					All partners
	Preparation of new educational strategies in function of Pilot Projects																																					Workteam 4
	Preparation of the last SWOT, intermediate report																																					Workteam 4
PP5	Pilot Project 5: Community buildings																																					6 partners: to be determined at NM, staff and students
PP6	Pilot Project 6: Public space																																					6 partners: to be determined at NM, staff and students

[illegible]

1.10. Sustainability (max 3 pages)

1.10.1. Main preconditions and assumptions during and after the implementation phase

- Fixed deadline: The project is structured in semesters, with a deadline of 3 years.
- Milestones: are set in a project plan for each Workteam. Important milestones are the Network Meetings (one per semester and one at the end) and the Conferences (as intermediate deadlines)
- Available resources: each partner guarantees the needed resources (mainly time of the coordinators and participants) to carry out the different actions.
- From within the organisation certain requirements are set as regards method of operation, procedures and templates.
- Insight and changes of development planning: A previously agreed period of time before delivery of the intermediate results will be agreed in the Network Meeting. Changes in the development schedule must be passed on to the acceptance of the consortium before implementing them.
- Participation in development schedule: is done with Workteams and with a project time plan.
- Quality of intermediate results: is controlled by the work-group, the lead coordinators (an internal and external evaluation committee).
- Intermediate results will be discussed on the Network Meetings and Conferences (milestones)
- Support of development team: three assistants are considered throughout the project, to assist in all tasks of the project.

1.10.2. Initial risk analysis and eventual contingency plans

The project proposal aims at maximizing success. This is achieved by repeated critical questioning and iteration; formative Workteams with well-defined tasks; evaluations and the presence of external experts and critics; multiple action and action takers; broad in depth discussions with associates and indirect partners (other HEI's, local governments, professional and economic bodies); involvement of academic management staff; permanent web discussion forum. This is achieved as follows:

Repeated critical questioning. At each step the project and its elements are assessed with propositions for possible adjustments.

Formative and summative evaluations of all actions in function of the described objectives.

The project is conceived in an **iterative way in successive steps**. To augment the chances of success the project-proposal uses the well known system of critical questioning and of spiral iteration (to define, to test, to assess, to re-test, to re-assess, ...)

Multiple action and action takers. The multiple actions minimize risk. The project does not depend on only one Conference, or one Pilot Project but on 3 Conferences, 7 Network Meetings, 3 Workshops and 6 Pilot Projects. If part of a Pilot Projects fails possible results can be reached in the other Pilot Projects. The Conferences will be held for at least 70 assistants (partners, associates, guests). This gives an essential large discussion group and guarantees broad in depth discussions.

Multiple partners. The project involves 18 partners, this multiplies the possible results.

The continuation of an already existing **solid partnership within the ALFA framework of seven institutions** (Argentina, Belgium, Brazil, Chile, Cuba, Spain and UK) that already know each other and have collaborated before in ALFA projects, gives an additional strength to the project.

Involvement of academic management staff. This guarantees a sustainable development for quality assurance for higher education within the curriculum of the education in Architecture.

Website. A permanent web discussion forum is opened. In this sense a broader community operates as critical respondent. Starting web discussion on the topic "Teaching innovations and strategies for quality management in the master architecture and urban design" (*what is innovative for whom, where and why, what is good practice, etc*) to disseminate experiences, critical analyses and discussion.

External evaluation: In the final conference three specialized keynote speakers are invited to participate in the discussions and assessments, and to formulate their advice.

Flexibility in the program: If the case is (through political, economic or other reasons) that a Pilot Project or a Conference, or Workshop cannot be carried out, the place can shift to another place, or be postponed. A single pilot project might even, if nothing else can be done, canceled. The number of Pilot Projects allows for the loss of one without endangering the whole project.

An interesting failure. A Pilot Project can fail in the sense that the teaching and research methodology of that best practice was not valid at that particular Institution. This is of course not a valid failure because that outcome can lead to an important lesson to be learned.

A **synchronization** of University Curricula and the use of similar and comparable structures for training in the diverse Institution can and will occur. There is a risk involved as this will not happen with absolute certainty because of local legislation, university policy, financial issues or other problems.

Initial risk analysis and eventual contingency plans, as follows:

- A coordinator leaves the partner HEI (high). Action: Each HEI has 2 coordinators. The other coordinator will find a new companion.
- A HEI cannot perform an action (medium). Action: Lead coordinators LA/EU redistribute the action to a later date of place.
- A HEI can't fulfil its obligations (national disaster, political instability, or other) (low). Action: Lead coordinators LA/EU redistribute the tasks towards the other partners.
- The results of a person or a working group don't meet quality standards. (low/medium). Action: an evaluation committee (using iterative formative evaluations) takes actions to resolve the problem in time.
- SWOT analysis: The country of the partner HEI is unstable due to political or economic reasons. The Swot analysis will be postponed to a later date (shift with another partner). If during the whole period the country is unstable, the SWOT will be done partially with the collected data by the local coordinators
- A HEI can't contribute its 2% own budget. (low). The own contribution is mainly paid by personnel cost. Lead coordinators LA/EU will take measures towards the higher management of the HEI. There are enough margins to attain the compulsory 20% of the budget.
- Website-server fails. (low) An EC-HEI takes all measures to secure the data. A back up is made. The project is not so technically sensitive.
- Physical injury of a participant (low/medium). Action: all HEI's must take insurance for travel.

Indicators:

- Full partnership of all 18 partners in all actions.
- The initiation of different Pilot Projects.
- The amount of good practices collected.
- The quality of the work produced by the students and staff in the different actions of the program.
- The level and range of dissemination of them.
- The organization of innovative experimental practices.
- The level of assimilation of the innovative practices.
- Assessment of the different steps by staff members, academic management staff, students
- The results of the Workshops and Pilot Projects will objectively display the achievements of the action, including the adoption of these practices by other institutions.

Sources of information:

- Number of experiences presented in conferences and collected in the website.
- Number of academics, institutions, associates and guests attending per conference: approximately 70 attendants expected
- Number of academics participating per Workshop: approximately 54 attendants of 18 institutions.
- Number of students attending per Workshop: approximately 80
- Number of Pilot Projects: expected 36 (6 x 6) from 18 institutions.
- Number of SWOT analysis: 18 (18 partners)
- Reports on Pilot Projects according to template and Publications resulting from Conferences
- School and student evaluation of the pilot project: 36

1.10.3. Sustainability of the action after the project

- Concrete propositions to restructure and synchronize the university curricula in ADU in function of new challenges are given to the highest management level in the HEIs, governmental institutions (Ministry of Education) and professional entities (Colegios Nacionales) for implementation.
- The handbook best practices, guidelines and strategies on competence based learning in a design context will help the change towards competence learning education. Good practices will have a long and wide benefit for the local curricula, as it will raise the quality of teaching and the common standards for quality management and add to 'life long attitude'.
- In the publication concrete propositions and guidelines to update, modernize and synchronize university curricula in architecture, design and urban planning are been produced, in close contact with the LA tuning project and other HEI's and in line with the European approach, creating sustainable links between the HEI's of LA and Europe. The proposals in the final reports and documents – with a thorough dissemination – will give all HEI's in ADU of LA strategies to improve their curricula in function of the development of higher education, creating regional integration and social cohesion and it will help towards the creation of a common higher education area in LA. The proposal fits in the general and specific objectives of the ALFA-call of improving the quality, relevance of the Higher Education in LA, stimulating a more balanced and equitable socio-economic development in the region. It creates a strategic plan for quality management and control, produces comparable practices for quality evaluation, and it will help to consolidate accreditation as an important issue for high quality education.
- The intention of the project is that the experience of the cases will improve the educational settings in all universities long term; a common educational space with local regional specificity will occur (long lasting strategy).
- All partners will sign a multilateral agreement for further cooperation and monitoring in interaction with the associate, the regional professional bodies and the new LANHSA.
- Bilateral agreements between the HEI's.
- By seeking explicit synergy with the LA ALFA tuning and ARCHI-Mundus projects the impact on the curriculum is more guaranteed, not only because the results will be more refined through continuous feedback, but also through the dissemination.

The project will have a large impact on the quality enhancement and development of a sustainable curriculum in the participating universities. Defining the overall and specific objectives with concrete propositions will create synergy of the HEIs with respect of regional identity. Including local government and bodies and academic management staff in the project supports the implementation of the results. Partners will not only benefit from the program personally, they will also share and distribute their experiences within their own (already existing) networks within the country or region. That will lead towards a further synchronization of institutions' curricula, compatible and readable diplomas, the use of similar and comparable structures for training, interchange of students and staff, thus leaving the system open for further improvement and networking.

1.11. Logical framework

	Intervention Logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
Overall objectives	<i>What are the overall broader objectives to which the action will contribute?</i>	<i>What are the key indicators related to the overall objectives?</i>	<i>What are the sources of information of these indicators?</i>	
	The overall objective of this proposal is to develop measures, actions and strategies (in line through and in concordance with the previous ALFA projects, the Tuning Project LA and the ENHSA/La-project) for restructuring and developing the education curricula in function of needed competences for HEIs in the expanded field of Architecture, Design and Urbanism (ADU) in Latin America, to the demands of an (ever) changing international world, improving the future employability of their graduates and the quality of life of the urban and rural population in a sustainable way, especially the traditionally excluded urban poor.	(1) A signed Memory of Understanding as a multilateral agreement by all 18 partners. (2) A multilateral agreement by all the partners for further future cooperation and monitoring (3) The bilingual publication with guidelines and strategies to update, modernize, restructure and synchronize the university curricula for the 21st century in the Field of ADU. (4) A number of copies send to other HEI's in LA and EC. (5) The number of hits on the interactive websites. (6) External evaluation. (7) Full cooperation of all partners in all actions.	The data will be collected through the activities (18 SWOT analysis, 6 pilot projects (36 sub-projects), 3 workshops by the 6 Workingteams. Preliminary reports guidelines and strategies will be formulated. Intermediate results will be assessed in the Network Meetings, in the Conferences, and in the interactive website. In the 7 Network Meetings and the 3 Conferences the results will be confronted with the results of other projects as LA Tuning and ARCHI-Mundus. Formative and summative evaluations will also take place. The final report is under the responsibility of Workingteam 6 under the leadership of the lead LA and EC coordinators.	(1) All partners must be fully engaged the project and its objectives. (2) Associates must fully participate. (3) Synergy with the related projects.(4) That out of the assessment of aims, methods and final outcome of the actions competences in relation to teaching methodology and quality management can be detected and described in function of a curriculum development. (5) The initiation and assessment of innovative teaching through the Workshops and Pilot Projects can create a strategic plan for the detection of common and regional competences in function of a curriculum-development. (6) That the Master thesis sets the standard to the access to the Diploma. The definition of standards and competences to be achieved in it impact the total curriculum that precedes this final course.
Specific objective	<i>What specific objective is the action intended to achieve to contribute to the overall objectives?</i>	<i>Which indicators clearly show that the objective of the action has been achieved?</i>	<i>What are the sources of information? What are the methods required to get this information?</i>	<i>Which factors and conditions outside the Beneficiary's responsibility are necessary to achieve that objective? (external conditions) Which risks should be taken into consideration?</i>
1	To identify <i>renewed professional areas</i> for the 21 st century in a regional LA context, in order to raise the employability of ADU graduates, clarifying the new skills and competences required in accordance with public authorities,	A description (in consensus of partners and associates) of global and renewed professional areas in relation to the different disciplines of Architecture, Design and Urbanism. To be published with examples - hard copy and e-book.	Sources: Partner, associate HEI's, local actors (professional bodies, local and international organisations, local governments, ministry of educations). website discussion. Methods: (1) establish a Workteam for this objective (2) Questionnaire & data collecting for the HEI's	The continuity of teaching and academic staff in less developed or political unstable countries, can be difficult. If due to political or economic reasons the place of the activity can not take place it will be changed to another country.

	Intervention Logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
	professional and economic bodies in a sustainable approach.		and Associates (3) 3 pilot projects supported by an assistant on common design issue, embedded in a local context. (4) 1 workshop (36 prof and 60 students attending) at one locality guided by an multidisciplinary and international academic team (all partners together) (5) intermediate reports. (6) Conference 1 (ca 80 persons attending) and Network Meetings	
2	To define and refine the <i>common and regional specific competences</i> for the different Master programs in ADU in relation to these renewed challenges, describing the indicators and guidelines for implementation in a renewed curriculum and so raise the quality and relevance of the Higher Education.	(1) Publication of matrix of common and regional competences describing the indicators (2) Recorded debates of the networkmeetings / conferences and presentations on the web. (3) External evaluation report	Sources: (1) the results of the existing LA tuning project an intermediate results of the ARCHI-mundus project. (2) the partner HEI's in the different countries and their experiences (3) the discussion with the associates and other competence based educational system like in EC (4) the detected renewed professional areas. (5) website discussion. Methods: (1) establish a Workteam for this objective supported by an assistant (2) inquiry and mapping material, questionnaire, matrix (3) the SWOT analysis of each of the 18 partners (4) 6 pilot projects on common design issue, embedded in a local context (5) 1 workshop at 1 locality guided by a multidisciplinary and international academic team (all partners together) (6) intermediate reports (7) conference and networkmeetings	The collecting of data through the actions in less developed or political unstable countries, can be difficult. If due to political or economic reasons the place of the activity can not take place it will change to another country. The risk is small due to the number of actions and participants. Every partner has 2 coordinators. From each partner 3 academics (teaching & management) are present at the conferences, and 2 at the workshops. Every pilot projects has 6 parallel subprojects to assure comparision.
3	To map the existing curricula of all partners in function of (1) the description of competences and course–content of the HEIs in the consortium in relation to the <i>LA-Tuning Project</i> and (2) , the new defined and refined common and regional specific competencies as result if the identified renewed professional fields & areas for the 21 st century in a regional LA context and the aspects of creative design and trans-disciplinary thinking, in	A document with the SWOT analysis using the parameters agreed in the LA-Tuning project– of the existing curricula in ADU of the 18 partners and conclusions toward a renewed curriculum.	Sources: overview of the curricula of all partner HEI's (content, attainment targets, qualifications, structure, masterthesis) (2) overview of teaching methods and achievements (3) overview of the student work (4) discussion with the local actors. Methods: (1) establish a Workteam for this objective supported by an assistant (2) A SWOT analysis format (3) an in situ visit of the campus, the teaching facilities, the educational methods, participation to a design evaluation moment (4)	The country of the partner HEI is unstable due to political or economic reasons. The SWOT analysis will be postponed to a later date (shift with another partner). If during the whole period the country is unstable, the SWOT will be done with the collected data by the local coordinators

	Intervention Logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
	accordance with the needs detected by public authorities and professional bodies		discussion with academic management, academic staff and students. (5) discussion with associates (6) intermediate report (7) conference and Network Meetings (8) report	
4	To define, describe and identify indicators and to produce guidelines for their implementation in renewed curricula, to enhance creative-design and trans-disciplinary thinking among ADU students; in accordance with the needs detected by public authorities and professional bodies focusing on the content, the structure of the curriculum and the educational culture of the curriculum	Publication of indicators and best practise based experiences in relation to creative design and transdisciplinary thinking. External evaluation . Dessimination to partner HEI's, & other HEI's in LA and EC.	Sources: (1) Expertise of all partner HEIs and the the mutual discussion on creative design and transdisciplinary thinking (2) Synergy with LA tuning project, Archi-Mundus project, EAEE and international scientific literature. (3) discussion with the local actors. (4) website discussion. Methods: (1) establish a Workteam for this objective supported by an assistant (2) 18 SWOT analysis (3) 3 workshops and 6 pilot projects (4) conferences and Network Meetings	If a HEI can't fulfil its obligations (national disaster, political instability, or other) the lead coordinators LA/EU redistribute the tasks towards the other partners. If he results of a person or a Workteam don't meet quality standards an evaluation committee takes actions to resolve the problem in time.
5	To identify, assess and describe new practices on competence-based teaching to achieve the desired competence-based education indicated in points (1) to (4) at all levels. This implies the implementation of teaching methods and creative teaching in a renewed curriculum. It is expected that a specific space for knowledge, reflection and transference of creative and innovative experiences in the teaching of ADU, will be generated promoting qualitative innovation.	Publication of best practise teaching methods on competence based teaching in a design environment. The detection and listing of teaching innovation and results per activity. The amount of good practises collected. The results of the pilot projects and design workshops. The quality of the work produced by students in the different actions of the program. The parallel study on the aims, methods and outcome in relation to the described competences. External evaluation. Dessimination to partner HEI's, & other HEI's in LA and EC.	Sources: (1) the results of the 3 workshop and 6 Pilot Projects (18 sub-projects) (2) the partner HEI's in the different countries and their experiences (3) the discussion with the associates and other educational techniques. (4) international literature. Methods: (1) establish a Workteam for this objective (2) inquiry and mapping material, questionnaire, matrix (3) the SWOT analysis of the 18 partners (4) 6 pilot projects (5) 3 workshops at 1 locality guided by a multidisciplinary and international academic team (all partners together) (6) intermediate reports (7) conferences and Network Meetings	The continuity of teaching and academic staff in less developed or political unstable countries, can be difficult. If due to political or economic reasons the place of the activity can not take place it will move to another country. The risk is small due to the numerous number of actions and participants; and due to the iterative methodology (to define, to test, to asses, to re-test, to re-asses)
6	To involve <i>associates</i> of different realms to attend some of the actions and use all expertise to help to carry the aims of this proposal, to enforce the regional integration, the social cohesion and sustainability of the project and the dissemination.	Active participation of professional bodies, local governments, local stakeholders, experts in the field of architecture, design and urbanism and urban development, HEI's of various countries and regions	Sources: Active participation of professional bodies, local governments, local stakeholders, experts in the field of architecture, design and urbanism and urban development, HEI's of various countries and regions. Number of associates. Method: (1) Conferences-participation to the discussion teams and group discussion. (2) Questionnaire.	If due to national disaster, political instability, or other an associate can not fulfil its obligations. the Lead Coordinators LA/EU will postpone the action, or try to get the data by other means to resolve the problem in time.
7	To make <i>concrete propositions to update</i> ,	A set of concrete propositions for cuurricula	Sources: (1) the results of the workshop and	A member of working team/focus group gets ill;

	Intervention Logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
	<i>modernize and synchronize</i> university curricula in architecture, design and urban planning in line with the European approach, creating sustainable links between the EI's of LA en Europe.	renewal in architecture, design and urban studies. Publication of guidelines and best practise based experiences. External evaluation . Dessimination to partner HEI's, & other HEI's in LA and EC	pilot projects. (2) the partner HEI's in the different countries and their experiences (3) the discussion with the associates and other educational techniques. (4) the results of the conferences and Workteams. Methods: (1) establish a Workteam for this objective supported by an assistant (2) inquiry and mapping material, questionnaire, matrix (3) the SWOT analysis of each partner (4) pilot projects (5) workshops at 1 locality guided by an multidisciplinary and international academic team (all partners together) (6) intermediate reports (7) conference and Network Meetings	the local coordinator will (temporaly) replace him/her. Through intermediate reports and half year Network Meetings quality control is acchieved.
8	To <i>disseminate</i> the results to other HEIs, local governments and professional bodies in the region.	(1) The bilangual publication with guidelines and strategies to update, modernize, restructure and synchronize the university curricula for the 21st century in the Field of ADU. (2) number of copies send to other HEI's in LA and EC. (3) the number of hits on the interactive websites. (4) Papers in jornals (5) conferences	Sources: website, number of attendance in the conferences and the website discussion, number of attendance (academics, profesionales, students) in the workshop and pilot projects; international conferences. Methods: website registration, list of participants to the actions,mailing list of adresses of HEI's in ADU in LA and EC.	
Expected results	<i>The results are the outputs envisaged to achieve the specific objective. What are the expected results?</i>	<i>What are the indicators to measure whether and to what extent the action achieves the expected results?</i>	<i>What are the sources of information for these indicators?</i>	<i>What external conditions must be met to obtain the expected results on schedule?</i>
	A signed Memory of Understanding (MOU), as a multilateral agreement by all 18 partners, at the end of the project.	The signatures of the Heads of Schools of all partners. The content of the MOU .	Internal and external assessments, and formative and summative evaluations of the project by the different participants (student, academic teaching staff, academic management staff, associates). The results of the actions.	The agreement of the Heads of Schools or Dean towards the results of the project. Since the academic staff will be regulary consulted, will participate in the conferences and read the internediate report the risk of disagreement is low; feedback from the academic staff is seen as essential throughout the project. On scedule: on time delivery of the intermediate and final report.
	A signed multilateral agreement at the end of the project, by all the partners for further future cooperation and monitoring, in interaction with the associates and other HEIs and professional bodies.	The signatures of the Heads of Schools of all partners. The content of the agreement .	The agreements itself.	Own funding for the bilateral actions for future actions.

	Intervention Logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
	The bilingual publication guidelines and strategies to update, modernize, restructure and synchronize the university curricula for the 21st century in the Field of ADU.	Full partnership of all partners. Full cooperation of all partners in all actions. Full engagement of associates. External evaluation of the quality of the Pilot Projects and Workshops and the detected results. A number of copies send to other HEI's in LA and EC.	Internal and external assessments, and formative and summative evaluations of the results of the actions and the formulated guidelines and strategies. Discussion in the conference by all partners on the innovative practice and the relation to the pilot projects. Conclusions of the conferences. Reports on the academic management staff on the different actions.	In time delivery of intermediate and final reports. Good timing of all actions and project management is very important to get a good interactions of the activities towards clear results. Interactions between the different stakeholders. Because of the many partners and their diversity it will not be easy to let the recommendations be fully accepted by the academic authorities. But because the project focuses on teaching innovations, competences, and quality management the impact is close to the actual teacher and real education. A set of standards is very important for international acceptance, international collaboration and accreditation. Further implementation of the innovative practices by the supra authorities like large academic changes is a slow process.
	Interactive website (Spanish/English). For disseminating the experiences, critical analyses and ongoing discussion available to all partner and associates, and later beyond the group to a wider university audience within LA and EC.	Number of hits on the internat consortium part of the website. Number of hits on the public accesable part of the website. Dynamic aspect of the website. Active website discussion.	Webmaster	If the website-server fails, an EC-HEI takes all measures to secure the data. A back up is made. The project is not so technically sensitive. Information campaign to other schools of architecture to participate in the discussion, and the assesment of the results
	Papers in journals and presentations at conferences on the project and the results. The partners will explain the results of the project at conference on ADU education over the world and will publish papers and indexed journals	Number of presentations at national and international conferences and meetings. Number of articles on the topic in journals (from popular to scientific)	Overview of the output of the academic staff of the partner HEI's in relation to the project. Databases of journals and libraries.	This activity runs also after the termination of the project. It is a long term dissemination.
Activities	<i>What are the key activities to be carried out and in what sequence in order to produce the expected results?</i>	<i>Means: What are the means required to implement these activities, e.g. personnel, equipment, training, studies, supplies, operational facilities, etc.</i>	<i>What are the sources of information about action progress? Costs. What are the action costs? How are they classified?</i>	<i>What pre-conditions are required before the action starts? What conditions outside the Beneficiary's direct control have top be met for the implementation of the planned activities?</i>
	Interactive website: as a close site within the web forum for the consortiumand as an open site to a wider university audience within LA and EC to innovate in education	Webmaster and web maintenance	Webmaster and Workteams Cost: 24.300 Eur.	There are no pre conditions for the partners. We can start immediately

	Intervention Logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
	7 Network Meetings	Mobility of staff (biggest actor), personnel assistance project, minimal technical support. Intermediate report of the working teams.	Periodical Network Meetingreport. Website. Preparation by lead coordinators LA & EC. Time management schedule. Cost: 569.430 eur	Preparation by the lead coordinators LA & EC. Intermediate reports by the working groups. Active communications. Agenda and clear meeting program (goals, working system, actions, deadlines)
	SWOT Analysis of Existing Partners' Programmes (18 partners)	(1): Preparatory activity: making a template-document in function of the SWOT analysis. Screening the suggested competences by the LA tuning project for Architecture and translating it towards Design and Urbanism. (2): SWOT analysis of the existing programs ADU regarding the results of the LA tuning projects. (3): SWOT analysis of the existing programs ADU regarding new defined common and regional specific competences, identified renewed professional areas for the 21st century and the aspects of creative design and trans-disciplinary thinking (4): Conclusions: guidelines with strategies to modernize the existing curricula in function of project results.	Sources: (intermediate) report by the working group. Discussion of the (intermediate) reports at the Network Meetings. Cost 193.700 eur.	Clear aims towards the working team. Composition of the working team. A format for assessment and a matrix for comparison needs to be made by the Workteam.
	Six Pilot Projects (6 x 6= 36 sub projects)	Academic staff to implement the project. Technical support (e-learning platform, laptop beamer per partner), information and communication plan.	(1): template made by the Workteams 1, 2, 3 & 5 and consortium in the first Network Meeting to guide the activity, detect and note the different aims and to assess them (2): Determination of the common issue and the local parameters. Setting up of a e learn platform (3): Launching of the pilot project in the design studio at the partner institutions (4): Midterm evaluation and steering of the project in function of the detected local academic and cultural identity in a full mutual open discussion between all participants (5): Final evaluation of the activity. Analysing of all the parallel projects. Comparison of the outcomes and experiences of the 6 partners. (template to be filled in by the 6 partners) (6): Assessment by the local staff members and the students with a digital questionnaire. (7):	Each partner is responsible for the activities planned in his own school as well as the selection of the teaching staff. A format for assessment and a matrix for comparison needs to be made by the working group and approved by the consortium.

	Intervention Logic	Objectively verifiable indicators of achievement	Sources and means of verification	Assumptions
			report by Workteams (8): presentation at the Network Meeting and the conferences. Basis for the next activities to refine the results and final conclusions. Intermediate report, half semester report, e-learning platform, network meetings and conferences as discussion and assesment moments. Cost: 63.276 eur.	
	3 workshops	Mobility of staff (biggest actor), personnel assistance project, minimal technical support (laptop beamer per partner). information and communicationplan	(1): template made by the work-teams 1, 2, 3 & 5 and consortium in the first Network Meeting to guide the activity, detect and note the different aims and to assess them (2): Launching of the intensive design workshop in the design studio at the partner institutions (4): midterm evaluation and steering of the project in function of the detected local academic and cultural identity in a full mutual open discussion between all participants. (5): final evaluation of the activity. Analysing of all the workshop. Comparison of the outcomes. (6): assessment by the international staff members, present local associates and the students with a digital questionnaire. (7): report by work-teams. (8): presentation of the report at the Network Meeting and the conferences. Basis for the next activities to refine the results and the final conclusions. Cost: 360.280	A network meeting to prepare. 3 assistants to follow, prepare and process full time the different components towards the final publication of the results and recommendations.
	3 Annual Conferences.	Mobility of staff (biggest actor), personnel assistance project, minimal technical support.time of coordinators and academic staff members	Meetings ad plenum will be used to bring the intermediate results, Q & A, panel discussions, parallel thematic group breakouts, team presentations to develop on the different presented issues. Day 1 arrival and evening meeting. Day 2, 3 to 4 conference activities. Day 5 conclusions and departure. Report by the Workteams. Cost: 527.290 eur	A network meeting to prepare. 3 assistants to follow, prepare and process full time the different components towards the final publication of the results and recommendations.
	Publication of results	Lay-outers, translators, software-programme, editors	Intermedate reports, results of the workshops, pilotprojects, conferences and working groups; Cost: 83.900 (incl translation)	Preparation by the Workteams, 3 assistants, network coordinators, and editorial board.