

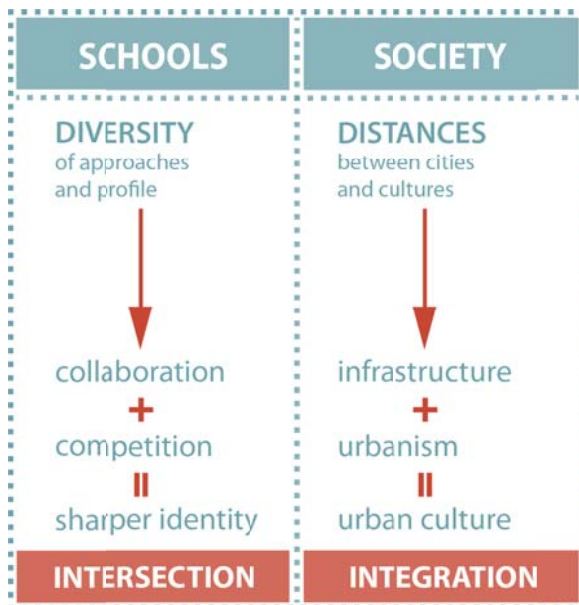
**INTERSECTIONS IN BUILT ENVIRONMENT:
PROMOTING INTERDISCIPLINARY HIGHER EDUCATION IN THE BALTIC SEA
REGION (BEINTERBALTIC)**

MOTIVATION AND AIM

The THEMATIC APPROACH of this application focuses the COMPEXITY of current urban conditions, actual chances and challenges; the traditional division of disciplines is no longer adequate. For example too often engineering focuses only on technical-economic aspects and architecture only on the aesthetical artistic ones, thus the holistic approach is neglected; building tasks are not seen as essential part of our civic life and instead society gets more and more sceptical against technology in general and changes in particular. Also many major projects struggle, like the new railway station for Stuttgart 21, the new airport in Berlin or the philharmonics in Hamburg. Among others part of the problem is that mistakes are quite often detected too late and responsibilities are hard to define and assign.

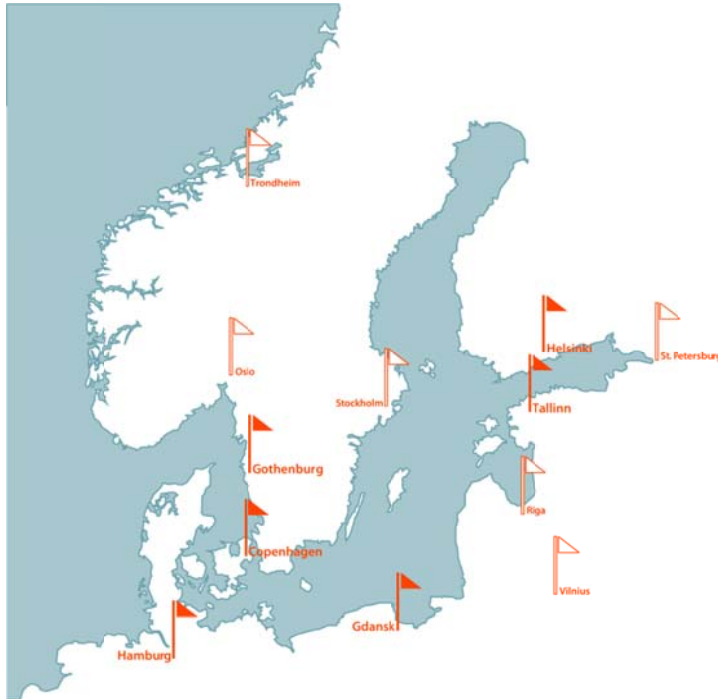
Thus this COMPLEXITY requires cooperation and understanding between the disciplines. The basic for these needs to be implemented in education and a new LEARNING MODULE in higher education of built environment becomes essential. Also individual disciplines do not have the necessary capacity to develop the comprehensive understanding alone therefore INTERDISCIPLINARY APPROACHES are needed in order to frame and address the COMPLEXITY of the praxis of contemporary built environment in general and the INTERSECTION between architecture and engineering in particular.

All participating SCHOOLS have different approaches and profiles. This DIVERSITY allows collaboration and competition at the same time. The resulting INTERSECTION sharpens the identity of each school.



In addition this project also has a STRATEGIC REGIONAL APPROACH: the Baltic Sea Region. All project partners belong to the Baltic Sea Region. This cultural region, respectively the chosen cities have much in common: all of them are harbour cities with their specific relation between infrastructures and urbanism. Through geography and history they are linked intensively to each another as well as at the same time culture and geography cause distance: each city has its own urban culture. Thus this project aims the INTEGRATION of SOCIETIES in the Baltic Sea Region.

The OVERALL GOAL of the project is to enhance the quality and relevance of higher education in Baltic Sea Region by improving and adapting the current curricula of built environment disciplines of participating universities. Due to many commonalities between them cities will benefit on different levels from joint solutions and outputs. Furthermore, the cooperation between these partners will support the strategic aims of the EU Strategy for the Baltic Sea Region and its priorities.



The project AIMS:

- 1) to develop and test new teaching methods, formats and instruments in the education of built environment
- 2) to adapt current curricula to contemporary and emerging labour market needs
- 3) to equip the students with the interdisciplinary and intercultural competences and skills needed to deal with complex problems in multicultural societies
- 4) to promote, increase and exploit further the cooperation between the universities on all of the Baltic Sea Region supporting its sustainable development
- 5) to disseminate the project results and outcomes to the relevant target groups on all levels
- 6) to develop and strengthen an interactive dialogue between the universities and non-academic sector
- 7) to fill the gaps between theory and practice strengthening the links between the educational and the labour market
- 8) to support the better use of EU transparency and recognition tools (ECTS).

Among several reasons why this project should be carried out TRANSNATIONALLY we point out the most important ones:

- 1) The exchange of experience and know-how in teaching and learning the disciplines of built environment in partner countries in order to find the best methods, formats and instruments
- 2) Through the mobility the future professionals will be prepared to work in multicultural and international environment.
- 3) Established network will ensure the international interaction between all relevant stakeholders and support the comprehensive and sustainable development of higher education in partner countries and all Europe.

The international cooperation of students, teachers as well as other interested stakeholders makes it not only possible for them to have access to data from different European nations, but also to learn how to cope with intercultural challenges. These concern the contents of curricula and teaching material and the differing teaching and research traditions, processes and theoretical explanations across cultures.

INNOVATION OF THIS PROJECT

While the INTERDISCIPLINARY APPROACH in higher education in general is not a new one, little information and practical methodology is provided for (a) how interdisciplinary courses should be structured and conducted. In this context a further question arises: (b) how much disciplinary education is necessary for interdisciplinary work. The reason for this statement is that interdisciplinary work needs a solid education in the disciplinary basics.

Many issues within the contemporary construction activities involve cooperation between architects and civil engineers in the broader sense. In particular, as a result of the latest technological advances (digitization of many operations and processes, changes in working methods, etc.) new questions for different stakeholders appear at the intersections of the built environment. In the course of this, not only the new content-related questions show up but rather new methods must be used in order to find innovative solutions. Therefore it is no longer sufficient only to promote the dialogue at the intersections of the disciplines, but the impacts on the disciplines themselves must be illuminated. For the intersections between architecture and engineering as well as other related disciplines of built environment it has practical consequences concerning the content, topics and methods.

The project will fill this gap by developing and testing the NEW METHODS on interdisciplinary education in the disciplines of built environment. The methodological recommendation provided in form of GUIDELINES FOR THE TEACHERS will be transferable also to the other educational fields.

PARTNERS AND FOCUS

The project consortium consists of the following higher education institutions from the BALTIC SEA REGION:

1. PP1 – (Applicant) - HafenCity University Hamburg (HCU), Germany;
2. PP2 – Gdańsk University of Technology (GUT), Poland;
3. PP3 – Tallinn University of Technology (TUT), Estonia;
4. PP4 – The Royal Danish Academy of Fine Arts. Schools of Architecture, Design and Conservation (KADK), Denmark;
5. PP5 – Technical University of Denmark (DTU), Denmark;
6. PP6 – Chalmers University of Technology (Chalmers), Sweden;
7. PP7 – Aalto University (Aalto), Finland

All project partners are strong and well known universities in their countries, with a lot of international experiences. They are participating in this project with an aim to (1) deepen the cooperation, to (2) build a network and to (3) create a common ground for further collaboration. A practical cooperation during this project is expected to be fluent and equal to all participating project partners, bringing in the experiences within the partnership in the earlier common activities. Many of the participants have already met several times face-to-face, they have co-published papers and arranged workshops together.

There are two main reasons for the choice of the project partner: (1) first the thematic focus on the intersection between the disciplines of the built environment and (2) second the geographical focus which is in accordance to the internationalisation strategy of the HCU.

(1) Thematic focus on the intersection between disciplines of the built environment

All project partners aim to find useful and innovative architectural, technical as well as urban planning solutions. They are convinced, that innovative solutions in these fields require trans- and interdisciplinary methods. Thus they place value on training of responsible interacting young professionals who think transnational and interdisciplinary and act in the sectors of construction and real estate. All involved universities support the project idea to strengthen the interdisciplinary approach and skills by providing new innovative methods and formats for interaction and participation.

(2) Geographical focus: the significance of the Baltic Sea Region is important for all project partners and corresponds to their internationalisation strategies and goals:

- The harbour cities in the Baltic Sea region are very similar to in their architecture and urban planning. Solutions found for the one city are transferable to other locations, which is a major stimulus for a strong scientific networking. The transmission capability of scientific jointly developed solutions is a key element.
- The partner universities in the Baltic region are easily reached via air, rail and water. The initiated exchange activities between students, academic staff, graduate students and professors can be carried on with a reasonable amount of time and expense.
- There are also cultural closeness and traditional connections as well as perspectives in architecture, planning, engineering and safety aspects.
- The harbour cities in the Baltic Sea Region have a special culture in common: they all stand in a long mariner-tradition, which is characterized by exchange, economy and innovative solutions.

Today, these cities are facing similar challenges - social, demographic, economic, etc. The teaching and research approaches in these cities are characterized by a common strong foundation with a similar prioritization of the challenges in contemporary time. All partners clearly understand their responsibilities and participated in the joint distribution of project tasks. All partners will be responsible for the successful project implementation and distribution of the project results keeping the established cooperation between them. The HCU Hamburg as an applicant institution is responsible for overall project management. All content related work packages have their coordinators responsible for the smooth implementation of foreseen activities

PROJECT STRUCTURE AND WORK PLAN

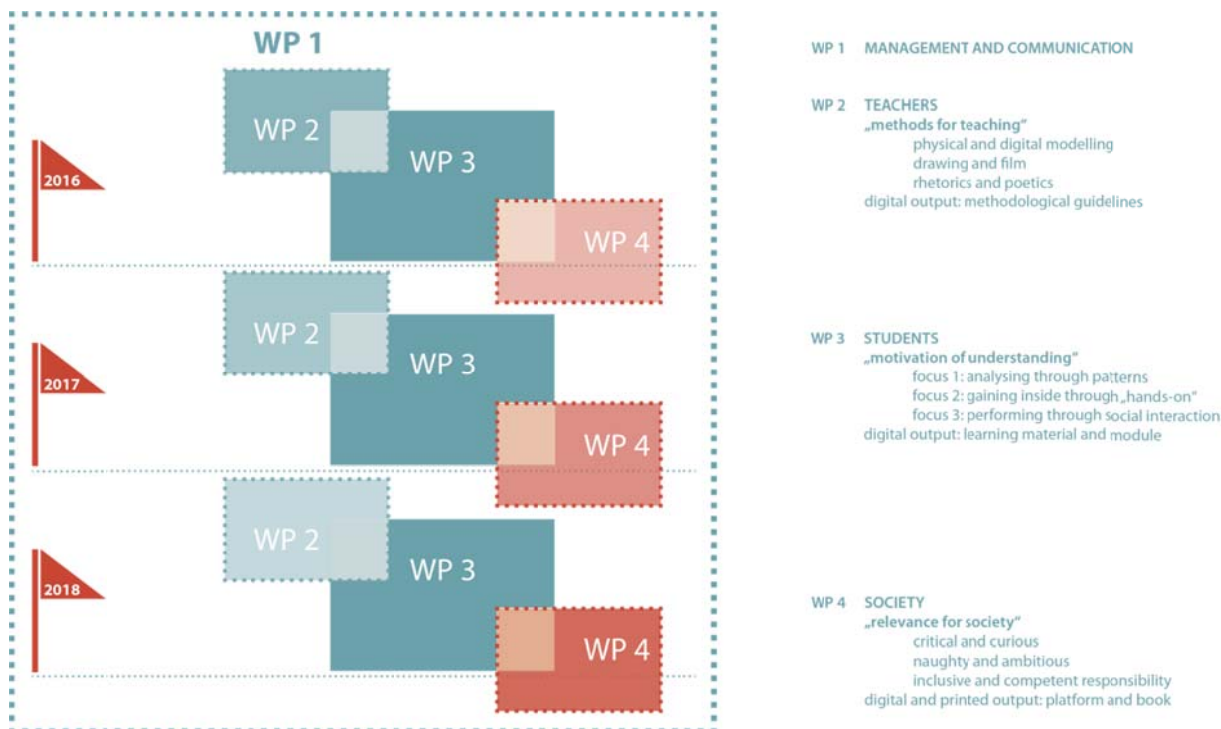
The project **BeInterBaltic** is structured in four interlinked and parallel progressing work packages (WPs):

WP1 – MANAGEMENT AND COMMUNICATION

WP2 – TEACHERS: methods for teaching

WP3 – STUDENTS: motivation of understanding

WP4 – SOCIETY: relevance for society



The WP1 MANAGEMENT AND COMMUNICATION is supporting operation and serving the needs of the whole project. The WP2-4 are so called “content-related” packages, each dedicated to a specific set of activities and connected to each other. Coordinators are appointed for each WP in order to secure and support the implementation of planned activities. The WP coordination is distributed among project partners based on their skills and experience.

In accordance with the PROJECT GANTT CHART the project activity types will be indicated as followed:

- An Project Management and Implementation Activity
- On/An Intellectual Output / Activity
- Mn Transnational Project Meeting
- En Multiplier Events
- Cn Learning / Teaching / Training Activities
- N Number of the activity

WP1 – MANAGEMENT AND COMMUNICATION

COORDINATOR: HafenCity University Hamburg (HCU)

The objective of WP1 is to ensure successful project implementation. The general management and coordination is the task of the Applicant HafenCity University Hamburg (HCU). In case of the project approval the Applicant will undertake the role of the lead partner and will act in name of the project. The HCU will design overall and annual working plans, prepare partnership agreements, report to the donor according to the requirements and whenever necessary. Within the WP1 the visibility and dissemination of project ideas and results, as well as awareness rising of the target groups and final beneficiaries about the project issues will be ensured.

ACTIVITIES WITHIN WP1

A1: Management of the project and project finances

The HCU Hamburg as a project lead partner will be responsible of general day-to-day management, including the financial management.

The tasks of the lead partner related to financial management are among others:

- to ensure that the project objectives and tasks are successfully carried out on budget and completed in time;
- to prepare and supervise regular (twice a year) internal financial reporting by the partners;
- to assist and advise project partners in reporting their expenses;
- to initiate and coordinate the discussions on financial issues during internal partner meetings, via skype and phone;
- to report the project expenditures to the donor.

Financial management will be taken care of by a specific person, having specific experience in financial management of the EU financed projects and working in the financial department of the lead partner institution.

A2: Design of the overall as well as the annual working plans

In order to ensure proper and in time elaboration of planned activities and outputs an overall working plan and its implementation schedule will be developed by the lead partner. These plans will include a detailed list and assignment of all activities planned within the action. During the first meeting of all project partners, a work plan and its implementation schedule will be presented, reviewed and finalized.

A3: Election of the Project Steering Committee (PSC)

The fulfilment of the project goals will be safeguarded by a Project Steering Committee (PSC), consisting of representatives from all project partner organisations. The PSC will be elected at the Kick-Off meeting and will decide on all aspects that concern the project as whole, e.g. important actions, significant amendments, delays in procedure or settlement of disputes. It is planned that the PSC will hold a meeting once a half year, but can come together on an ad hoc basis if there are important issues to decide on. At the final meeting of the PSC project results will be evaluated and the sustainability of the outputs will be discussed in order to estimate the needs for future actions.

A4: Arrangement of transnational partner meetings, including virtual conferences

Three transnational partner meetings are foreseen in the project lifetime in order to discuss the progress of the project and to plan next steps:

M1: Kick-Off meeting in Copenhagen (October 2015)

M2: Interim meeting in Helsinki (February 2017)

M3: Final meeting (following the multiplier event) in Tallinn (August 2018)

The people participating at the transnational project meetings will be the lead partner as well as key persons responsible for the project management from all partner organisations. Additionally and depending on the issues to be discussed during the meeting, other project stakeholders from partner institutions and associated partners will participate in it. The results of all partner meetings will be available as minutes and distributed to the project partners.

A final meeting will be used to evaluate the project results and outcomes as well as to discuss their sustainability and estimate the need for future actions.

A5: Compilation of project reports providing them to the Donor

The lead partner will be responsible for the collection of all necessary information in order to compile and provide to the donor the required project reports. For the collection of information needed the lead partner will develop questionnaires to each project partner.

A6: Assurance of the quality of the project activities and outcomes

At the first working meeting the partners will discuss how the success of the project can be measured. Within the Project Steering Committee (PSC) a Team for Quality Assurance (TQA) will be established. The TQA will once a year and be responsible for setting up the Quality assurance plan, including i.a. :

- the description of the particular roles and responsibilities of every partner and their relation to quality management
- defined quality standards for the documentation,
- definition and verification of project indicators (quality and success indicators will be further used for reporting to the donor)
- if needed: arranging meetings (during partner meeting or virtual) according to the outcomes of the indicators.
- collecting the information and producing and dissemination a final quality evaluation report (the final evaluation will be implemented at the end of the project and it will be impartial, credible, and carried out with the participation of the all project stakeholders). An evaluation report will be prepared and distributed among the project stakeholders as well as placed online.

A7: Development of the project communication and information plan

During the first two months a comprehensive communication plan will be set up. It will define in detail communication tools, activities, target groups, media and all communication channels, as well as responsibilities of all involved project stakeholders. All project partners will actively support this activity, as a proper communication of the project key messages is one of the crucial aspects for successful realization of the foreseen activities.

A8: Elaboration of a detailed dissemination plan

As a part of the project communication and information plan a detailed dissemination plan will be prepared by the project lead partner at the beginning of the project lifetime. All project partners will support the lead partner with their expertise and networks.

Within the prepared dissemination plan the project aims:

- 1) to inform the target groups about the project, its activities and results,
- 2) to ensure the information flow and the interaction between the interested stakeholders and
- 3) to support the project sustainability and continuity.

A9: Promotion of the project, its results and outcomes

All project partners will be involved in the dissemination activities of the project outputs using their own networks, channels and instruments. Each project partner is also responsible for the dissemination strategy in their own countries. Involvement of communication and PR offices in partner universities. Project results will be also disseminated through the established digital platform.

A10: Project supervision, monitoring and evaluation

This action shall evaluate the quality and success of the implemented project activities and their impact on the target groups and final beneficiaries. Within this task special attention to risk mitigation throughout the project will be paid. Furthermore, all activities will be accompanied by monitoring actions.

A11: Definition and measurement of project indicators

At the Kick-Off meeting the partners will discuss how the success of the project can be measured. The project management team will prepare the definition and verification of project indicators. All project stakeholders will be provided with detailed information and instructions on how to measure and to report the indicators. All indicators will be set up in the communication and information plan and their performance measures and updated during the whole project lifetime.

A12: Ensuring sustainability

The project aims on sustainability and continuum of the project results, outputs and impacts by ensuring the dissemination of the project results and exploitation outcomes by involving new stakeholders (e.g. other universities in the Baltic Sea Region) and interest groups (e.g. local chambers or companies) to the project activities and networks.

The main target of the project sustainability is to achieve the integration of new learning module "Intersections in Built Environment" into the current curricula of partner universities already at the end of actual project implementation period. This as well as the active usage of elaborated methodology teaching for interdisciplinary groups will enable sustainability of the project outcomes after the project is finished. During the project lifetime a digital platform will be established which enables interactions between different disciplines, stakeholders, universities and non-academic sector during the project as well as it is an essential element to guarantee sustainability after the project is finished. The developed project documents, materials, website as well as the emerged and strengthened contacts between different participants remain the main platform for any cooperation activities in the future. In addition, regular face-to-face meetings will be maintained via networks of each partner institution.

After the project implementation, the networks and cooperation structures of the partners are important channels to reach the target groups and disseminate the project outcomes further. The annual international conferences, seminars, workshops and other meetings, which are based on active working methods with sessions, workshops and seminar presentations, provide excellent forums for reaching the project target groups and disseminating the project results. Moreover, the project results are further refined and developed through these educational networks, which have an active role both in national and international educational development. Thus the results of the project will not only be beneficial for the consortium members, but also the higher education institutions throughout Europe, even globally will benefit from them.

Each partner organisation is a member in various collaborating networks, which gather regularly to exchange ideas and experiences, review new models on educational development and assess the initiative's progress. Thus, the results of the project will be distributed further.

During the project, a Memorandum of Understanding (MoU) will be signed between the project partners and associated partners. The objective of this agreement is to promote joint activities on interdisciplinary educational development of disciplines of built environment in the future contributing to the sustainable development of the whole Baltic Sea Region. In addition, the agreement encourages the networking institutions to design and implement joint research and development activities in various fields.

WP2- TEACHERS: METHODS FOR TEACHERS

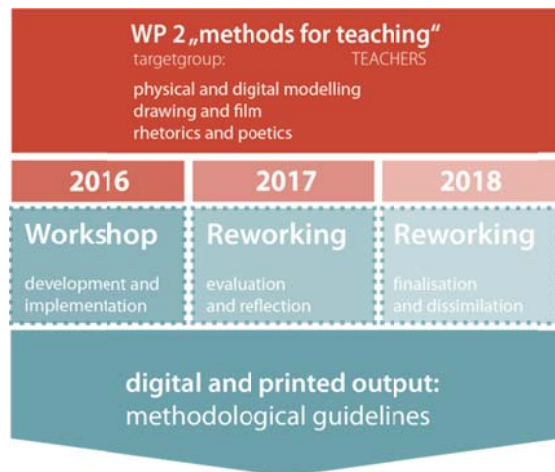
COORDINATOR: Chalmers University of Technology

TARGET GROUP: Teachers

The AIM of the WP2 is to bring the teachers of disciplines of built environment together in order to evaluate existing and develop new methods as well as formats of interdisciplinary teaching. These methods and formats will include (1) physical and digital modelling, (2) drawing and film and (3) rhetorics and poetics, all of them focusing on chances and challenges of the build environment.

OUTCOMES and events planned:

- 1) LEARNING, TEACHING AND TRAINING ACTIVITY: Workshop for teachers in the disciplines of built environment in Gothenburg
- 2) INTELLECTUAL OUTPUT: Methodological guidelines for teachers on interdisciplinary teaching in the disciplines of built environment



ACTIVITIES WITHIN WP2

A13: Elaboration of the detailed WP2-plan

The Chalmers University of Technology as a WP2 coordinator in cooperation with project lead partner will develop a detailed WP plan where the activities, outputs, responsible and involved partners as well as timeframe for each activity will be set up. The WP2-plan will be presented, discussed and finalized during the kick off meeting in Copenhagen.

C1: Workshop for teachers in the disciplines of built environment.

LOCATION: Chalmers University of Technology, Gothenburg

SCHEDULE: January 2016

The planned workshop will serve as a platform for exchange of experiences between the university teachers of the participating institutions. Within this collaboration they seek to jointly develop new teaching methods and formats in the disciplines of built environment. Teachers will acquire an active role in developing their educational resources using agile methodologies and formats. The collaborative process of developing the teaching material will allow to name the common problems within the Baltic Sea Region and to find appropriate solutions.

Teaching methods and formats in the build environment focus (1) physical and digital modelling, (2) drawing and film and (3) rhetorics and poetics. The model is an essential element in developing the

build environment, but its specification in the different disciplines is quite diverse. Thus it is quite exciting and challenging first to learn about the different approaches of the disciplines and then second to exchange them. Technology enables new methods in modelling, thus digital modelling brings interesting interfaces between the disciplines. Also the presentation of ideas and concepts shifts from 2D sketches and drawings as far as to the movie. This new methods will have an impact on the disciplines as well as their cooperation. Working at the intersection of the disciplines communication – more precise the word, rhetoric and poetic – becomes vital. New teaching methods should be aware of different meanings as well as intensify the verbal description.

The aim of the workshop will be to develop new methods and to implement them in the summer school as well as in the guidelines. In further steps (further meetings) the project partner will evaluate them and reflect their suitability. Finally they will be disseminated. Even if the workshop will be held only once at the beginning its effect will be throughout the whole project.

PREPARATION OF THE WORKSHOP

The WP2 coordinator (Chalmers) together with the project lead partner (HCU) will develop the preparatory tasks for all participants of the workshop. Each participant will analyse and prepare a summary of:

- Methods and formats regularly used by the participant of the workshop teaching in his discipline
- Creative approaches in order to deal with a given task.

These tasks help to position and evaluate the own creative process as well as the applied teaching methods and formats in order to understand how different universities and disciplines are working. Thereby a common ground for interdisciplinary approach will be found as well the differences not only between the disciplines but also between the different countries will be understood.

IMPLEMENTATION OF THE WORKSHOP IN GOTHENBURG

During the 5 day-workshop teachers of different disciplines of built environment will work together in small working groups dealing with the following issues:

- Strategies for interdisciplinary teaching: Contextualizing, Conceptualizing and Problem-based teaching
- Maintenance of depth in interdisciplinary approach
- Incorporation of interdisciplinarity into the teaching
- How to bring together students and ideas from different disciplines to jointly frame a problem, agree on a methodological approach and analyse the data.
- Crucial role of interpersonal and communication skills
- Challenges of teaching intercultural mixed students
- How to involve students in the production of the teaching material (peer-teaching)
- Within the working groups the participants will start to develop teaching material based on the real problems/situations which will be tested during the planned summer school.
- During the workshop the first draft of methodological guidelines for teachers will be elaborated.

The workshop will be supported by experts, for example Prof. Olga Popovic Larsen from the Royal Academy in Copenhagen (book: Conceptual structural design: Bridging the gap between architects and engineers) and Prof. Dr. Ingrid Breckner from the HCU Hamburg (book: Methods of space exploration. Teaching book for research and design in social spaces), who specialize i.a. on the different methods in teaching disciplines of built environment.

POST-PROCESSING

After the workshop the teachers will stay in active contact and further develop the teaching materials and guidelines. The developed digital platform will provide a platform and tools for further collaborative activities and serve for the better communication between the teachers in exchanging the ideas and knowledge.

O1: Methodological guidelines for teachers

Due to the actual complex tasks and challenges there is a need for cooperation and understanding between the disciplines. Thus interdisciplinary teaching is necessary. Up to now different approaches to interdisciplinary teaching have been made, but still there is only little information provided and no practical methodology exist. Consequently one milestone of this application will be the development of methodological guidelines.

These methodological guidelines will be developed within the WP2 by all project partners under the coordination of Chalmers University of Technology. This intellectual output aims to (1) evaluate the existing teaching methods and formats addressing interdisciplinary and intercultural mixed students as well as the new one developed during the project and to (2) develop a convenient tool for teachers helping them to provide students with the skills necessary for addressing the complexity of built environments.

The guidelines will appoint the manifold teaching methods and formats presented, discussed and reviewed within the workshop. Additionally the guidelines will supply the methods and format with its methodological approach. Within the guidelines the process of methodologically-oriented concept development will be presented and analysed: (1) Semantic -> aim, (2) Syntax -> purpose, (3) Pragmatic -> means/resources. As the interdisciplinary projects require complex solutions, a single method is most often insufficient. For that reason it is important to know how the methods or the strategies and instruments within these methods could be combined with each other.

Within the Guidelines the procedure of choosing and combining appropriate design and research methods in the interdisciplinary questions and projects of built environment will be discussed and analysed. Furthermore, instruments and strategies characterizing the methods in each discipline will be presented and evaluated.

Following topics will be analysed:

- limitation and narrowing of the interdisciplinary questions as well as argumentation of this step
- clarification of the spatial, financial, factual, technical and time-wise scopes
- formulation of leading question
- metrological framework for scientific procedure:
 1. Methodological preliminaries
 - 2.1. Evaluation of situation (inquiry and analysis)
 - 2.2. Concept/draft/model/plan (concept elaboration)
 - 2.3. Implementation
 3. Evaluation

The elaboration of this output will be divided in the following phases: preparation -> implementation -> adjustments -> finalization -> dissemination

O1/A1: PREPARATION

The WP coordinator in cooperation with experts from DTU and HCU will prepare a detailed structure of the guidelines. The structure will be presented, discussed and agreed during the workshop within WP2 in Gothenburg. The structure of the guideline will enclose the following aspects: (1) survey of the existing methods, (2) parameters of the context (academic curriculum, cultural, ...), (3) new

interdisciplinary methods, (4) new interdisciplinary methods explicit focusing intercultural groups (5) teaching material and (6) case studies.

O1/A2: IMPLEMENTATION

First part of the document will be based on the outcomes of the workshop. Thus it will start with a collection of existing methods used in the disciplines of built environment and will proof them with SWOT analyses (strength, weaknesses, opportunities, threats). The partners will analyse which methods from different disciplines can be used for interdisciplinary teaching. Different instruments and formats (e.g. mixed groups, joint science questions, strong mentoring, etc.) as well as different strategies for interdisciplinary teaching (Contextualizing, Conceptualizing and Problem-based teaching) will be analyzed and evaluated.

During the workshop the participants will discuss how to incorporate the interdisciplinarity into the teaching: how to bring together students and ideas from different disciplines to jointly frame a problem, agree on a methodological approach, analyse the data and find appropriate solutions. The outcomes of the workshop will be documented in the first recommendations and developed further between the project partners exchanging the knowledge, ideas and documents using the partner section within the digital platform (incl. webinars organized by WP coordinators).

Already during the preparation of the project proposal partners agreed on the importance of communication skills as well as challenges and requirements to teach intercultural mixed students. Thus one part of the guidelines will explicit exercise the methods and formats for teaching intercultural groups providing the recommendations and tools.

The guidelines with its methods and forms will be part of the new teaching module (O2) which will be tested in the summer schools. After the first summer school (BISS 2016) in Hamburg all project partners will analyse the problems and barriers appeared. For this activity the WP2 will prepare a detailed questionnaire as well as used other interactive methods (world-café method at the end of the summer school, where all teachers will come together to evaluate the event).

O1/A3: TESTING AND ADJUSTMENTS

Based on the experience made during the summer school as well as on the evaluation after the event, the guidelines will be adjusted and further developed. During the following summer schools various teaching methods and formats will be further tested and developed. Findings from the WP2 workshop, BISS 2016 and BISS 2017 as well as experiences teaching at their home universities will shaped the ideas and recommendations embedded in this document.

O1/A4: FINALISATION

Project partners will finalized the document after the second BISS (2017) incorporating the outcomes and experiences from both summer schools into the document under the lessons learned. The guidelines will be published as a E-book.

O1/A5: DISSEMINATION

The guidelines will be presented and disseminated through different channels:

- Digital platform
- Partner networks
- Conferences and scientific papers
- Multiplier event in Tallinn

The guidelines will be also disseminated “inside” the partnership transferring and applying the recommendations also to the other fields and disciplines.

WP3 – STUDENTS: “MOTIVATION OF UNDERSTANDING”

COORDINATOR: HCU Hamburg

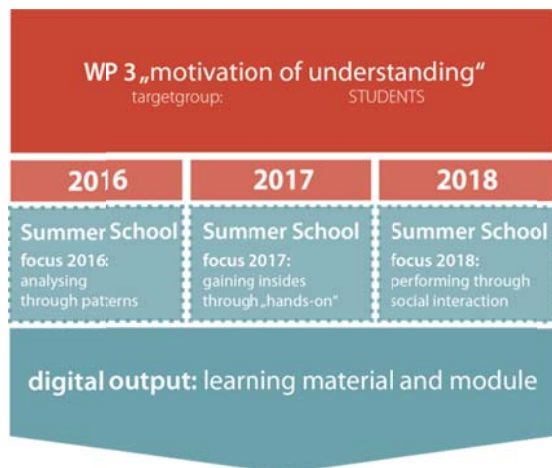
TARGET GROUP: Students

Appropriate and modern methods for successful education need to understand the motivation of the students. Thus the step from WP2 to WP3 is a paradigm shift from the methods of teaching and the requirements of the teachers towards the students and their motivation of understanding. To intensify these motivation different aspects of designing in the context of the build environment and at the intersection of the disciplines will be applied: (1) analysing through patterns, (2) gaining insides through “hands-on” and (3) performing through social interaction. These aspects depend on another and develop the examination of the relationship between the designer and the design. The first step is the interaction between the designer and the idea/concept. Here the analysing and developing of patterns will be addressed. Going further the next step includes the martial with all its consequences. The experience of the physical characteristics and behaviour though hands-on is essential to gain insights. And the last step in the here proposed procedure will be the interaction with society. Each of these steps will be addressed in one of the three summer schools which are the core activity in this WP.

Within this WP the teaching material for a new teaching module will be jointly developed. The teaching material will use all technological possibilities and elements and will include for example movies. The teaching module “Intersections in built environment” will be partly tested during the Baltic International Summer School (BISS) by using new teaching methods and formats elaborated in the WP2. After the evaluations and adjustments, all project partners will incorporate the new teaching module, including the movies in their curricula.

OUTCOMES and events planned:

- LEARNING, TEACHING AND TRAINING ACTIVITIES: Three summer schools BISS 2016, BISS 2017 and BISS 2018
- INTELLECTUAL OUTPUT: New teaching module “Intersections in Built Environment”
- INTELLECTUAL OUTPUT: Peer-to-peer movies as a specific element in the context of the teaching module (New learning material)



ACTIVITIES WITHIN WP3

A14: Elaboration of the detailed WP3-plan

The HCU Hamburg as a WP3 coordinator in cooperation with other project partners will develop a detailed WP3 plan where the activities, outputs, responsible and involved partners as well as timeframe for each activity will be set up. The WP3-plan will be presented, discussed and finalized during the Kick-Off meeting in Copenhagen.

O2: New teaching module “Intersections in Built Environment”

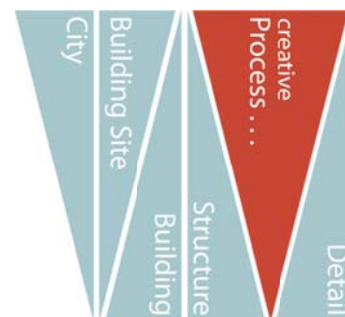
The aim of this output is (1) to develop a new teaching module “Intersections in built environment”, (2) to test the elaborated teaching material within the Baltic International Summer Schools (BISS) and (3) to implement the new module in existing curricula at partner universities. The teaching module consist of different methods in the context of the build environment, on specific elements of the teaching module are (4) movies, developed peer to peer and addressing different levels of perception.

The aim will be achieved through established close collaboration between the participating universities as well as between academia and non-academic key actors and stakeholders of the built environment at national, regional and at European level in order to better understand their needs for new knowledge, skills and competences.

The new module has a methodological approach as well as it focuses the design process in all its complexity. The methodological approach contains the following elements: (1) Identification of different methods in the related disciplines (2) Teaching / training the methods used by one discipline to the students from all disciplines (3) Transfer the methods to another discipline (4) Analysis and Reflection how the methods perform in a different discipline (5) Evaluation.



The teaching module reflects the design process and consequently is divided into different design steps. These design steps are very much in accordance to a more and more closer view to the task: (1) City, (2) Building site (task), (3) Building, (4) Structure, (5) Detail The methodological approach will be applied in each of this design steps.

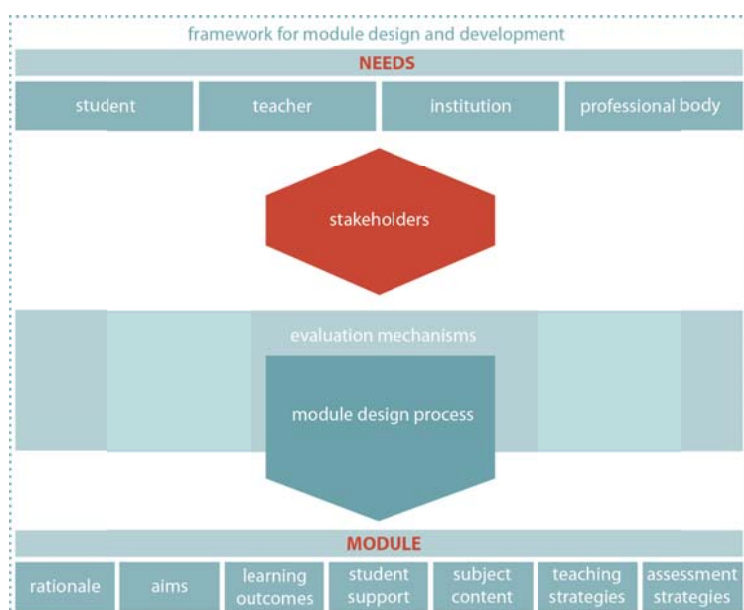


To proof the potential and the fitness of the methods different design tasks will be created.

O2/A1: PREPARATION

The WP coordinator in cooperation with experts among the partners will prepare a detailed structure of the new teaching module. The development of the teaching module will be based on the teacher workshop and will happen in accordance to the development of the guidelines. Thus in particular the preparation of the workshop is a prerequisite for the new teaching module. Here the survey among the project partners enables the team to get a broad and manifold catalogue of methods used in the different disciplines.

O2/A2: IMPLEMENTATION



The aim of the new teaching module will be that students become more confident in the methods of their discipline as well as they learn about the methods of other disciplines. They will learn how to transfer the “other” methods to their own discipline. In the last step they need to learn about analysis, reflection and evaluation of the result in relation to the used methods.

O2/A3: TESTING

Testing the elaborated materials and methods within 3 (2016, 2017 and 2018) Baltic International Summer Schools

O2/A4: EVALUATION AND ADJUSTMENTS

Evaluation and adjustments of used instruments, forms and material. The documented outcomes of each BISS will be included into the new teaching module. After a comprehensive feedback and adjustments, the module will be integrated in the curricula of the partner universities.

O2/A5: DISSEMINATION

The elaborated teaching materials for the module “Intersection in Built Environment” will be used by project partners in the future as the module will be integrated in their curricula.

Furthermore, after the “testing phase” the materials will be published online and available for broader audiences. With a help of the interactive digital platform the materials can be further adjusted and complemented.

O3: Peer-to-peer movies as a specific element in the context of the teaching module (new learning material)

The context: with a greater focus on e-learning as well as electronic communication and exchange, the peer to peer learning becomes more important. Next to actual class interactions students are obtaining learning materials electronically, experiencing the classes via recordings, and building their educational experiences in the virtual world. In such a context, peer interactions beyond the formal curriculum, especially with students in other disciplines, and organised by the participants themselves, become an essential component of successful learning and contributes to the development of a more effective curriculum.

The aim of the output is to test a peer learning as an interactive method for interdisciplinary learning and to support the opportunities provided in formal arenas, such as lectures, courses, etc. This activity will improve students' abilities to work in the interdisciplinary groups as well as to develop their problem solving abilities and understanding of the subject. At the same time they will have an opportunity to get to know better their peers, their thinking and various approaches of different disciplines of built environment.

PRIMARY TARGET GROUP: students of disciplines of built environment in the partner universities

FURTHER TARGET GROUPS/ FINAL BENEFICIARIES: all users of the digital platform where the movies will be placed for the further usage and dissemination

O3/A1: PREPARATION

Project partners will develop a detailed task description as a framework for further implementation. This will allow to analyse the finished outputs as well as to compare them of in order to get better know the differences between the different approaches and focuses dealing with interdisciplinary issues of built environment in the countries of Baltic Sea Region.

Several teachers who are participating in the project (at least one from each participating university) will include this task in their current teaching courses.

O3/A2: IMPLEMENTATION

During the spring term 2018 the students from each participating university will come together in order to prepare and make several short educational movies dealing with issues of built environment. Two main groups of movies will be sketched: (1) movies explaining a principle (structural, architectural, economical, ...). These movies will have strong educational character; (2) movies analysing a project, building structure. These movies serve as a case study. In both categories the medium "movies" allows easily different layers of information and interpretation. A movie can be only very descriptive, more or less one-dimensional. Adding art, perception, interpretation a more complex multi-layered result arises.

To create the movies the students will work within their local issues using the interdisciplinary approach. During the implementation of this output they will prepare a film scenario, find and contact the suitable experts, conduct the filming and develop a final product. Except for requirements set up by output coordinator on the length and possible topics, the students will have their freedom to decide on the formats and instruments to use.

O3/A3: PRESENTATION AND EVALUATION

Post-processing: the movies will be discussed and evaluated during the course at the home universities. Furthermore, the movies will be showed, analysed and discussed during the Baltic International Summer School (BISS) 2018 by its participants.

During the discussions the following questions will be analysed:

- Differences and similarities in the approaches and focuses dealing with interdisciplinary topics of built environment in the Baltic Sea Region;
- Can the concepts and solutions tackled be transferable between the countries;
- Peer to peer leaning as a method for interdisciplinary learning;
- Incorporation of the material produced and the method as well as formats used into the new interdisciplinary module "Intersections in built environment";

O3/A4: DISSEMINATION

All movies will be placed on the digital platform and used for educational purposes by project partners and other interested parties.

C2-C4: Baltic International Summer School (BISS 2016) in Hamburg

SCHEDULE: August 2016

The AIMS of this learning, teaching and training activity are:

- to test and further develop the elaborated new teaching methods and formats by working with interdisciplinary and intercultural mixed groups of students on all levels (Bachelor, Master, PhD)
- to equip students and teachers with competences, knowledge and skills of interdisciplinary interaction in order to successfully cope with contemporary challenges of building environment
- to encourage the cooperation between disciplines, cities and countries supporting the mobility and comprehensive interaction

TARGET GROUP: students in the disciplines of built environment of the participating universities

OTHER BENEFICIARIES: teachers, university society, non-academic stakeholders of the project

FOCUS: (1) analysing through patterns

The first step in a design process is the interaction between the designer and the idea/concept. Many different influences will be taken into account mostly controlled by the task (function: bridge or high rise, hospital or cultural centre,) and situation (cultural, social, geographical, financial ...). But in this stage the focus of work will be conceptual. It is an intellectual approach and allows identifying different cultural as well as disciplinary approaches. They have in common that they follow specific rules and patterns. These patterns can be historic or cultural references as well as structural concepts.

PREPARATION

During the first partner meeting the overall topic and working formats of the BISS will be discussed and the work programme will be developed. The coordinator of the WP3 in cooperation with all project partners will specify the application procedure and discuss the possible tasks for the application including the local components (the specifications (for example each partner university has a local boundary condition for the application)). This can be a specific prerequisite as well as a specific topic). The WP coordinator also will prepare the promotional material in line with the project communication strategy and all partners will be in charge of active advertising the BISS at their home institutions.

In order to ensure the continuous assistance as well as professional consultations to international and interdisciplinary mixed students groups, mentors from all partner universities (one from each) will be chosen (the mentor profile will be discussed and agreed on during the first partner meeting as well as through further internal communication).

In the preparation phase a webinar for all mentors via digital platform is planned where they:

- can (virtually) meet each other;
- discuss their tasks, responsibilities and challenges.

Several meetings with associated project partners will be held on the local level in order to get an input by preparing the teaching material and tasks for students. Key note speakers and experts from

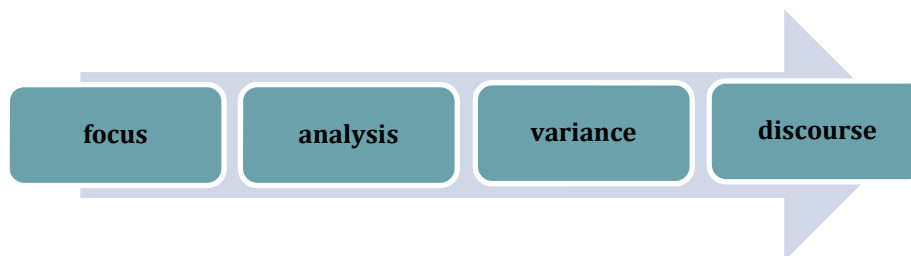
academic and non-academic sector will be chosen. 2 days-workshops with selected students will be organized in each partner university.

In order to promote the interdisciplinary higher education the teachers from other universities of Baltic Sea Region (from Vilnius (Lithuania), Riga (Latvia), Trondheim (Norway) and St. Petersburg (Russia)) will be invited to take part in the Summer School. Some of them will be asked to take make an expert input or undertake the role of guest critics.

IMPLEMENTATION

The BISS 2016 will have a duration of 10 days. 54 participants, representing all partner universities and different disciplines of built environment (engineers, architects, urban planners, etc.) will come together and build 6 working units, each of these will be divided into 2-3 internationally and interdisciplinary mixed working groups. Each working unit will have a mentor who also gives them informal feedback during daily supervisions.

Every student will experience the iterative creative process and pass following phases:



Joint identification of the existing problems, examination of various methods and elaboration of possible solutions will strengthen the cross-functional competences of representatives of different disciplines of built environment referring to their different academic and cultural background.

Several teaching methods and formats will be tested during the summer school:

- mixed groups with mentoring system
- expert inputs
- work on the real projects with involvement of different stakeholders
- incorporation of cross-cultural and professional learning-based approaches
- networking
- learning by doing
- incorporation of emerging technologies
- etc.

At the end of the summer school, students will present their final project ideas and work products in the public presentation within the attendance of invited experts and stakeholders from academia, authorities, research, and practice. Student workload at the BISS including the preparation and documentation of the Summer School will be expressed in 5 ECTS credits. The workload will be ensured by the workshop in addition with preparation and post-processing at the home universities.

POST-PROCESSING

During the BISS developed group projects of the students based on interdisciplinary principles will be documented and published as an E-book as well as disseminated to the relevant target groups. Within the summer schools established cooperation on the individual basis as well as the dialogue between the academic and non-academic sector will be further intensified within the framework of the thematic cluster.

C5-C7: Baltic International Summer School (BISS 2017) in Hamburg

SCHEDULE: August 2017

AIM:

- to test and further develop the elaborated new teaching methods and formats;
- to strengthen the competences, knowledge and skills of interdisciplinary interaction;
- to strengthen the cooperation between disciplines, cities and countries supporting the mobility and comprehensive interaction

TARGET GROUP: students in the disciplines of built environment of the participating universities

OTHER BENEFICIARIES: teachers, university society, non-academic stakeholders of the project

FOCUS: (2) gaining insides through “hands-on”

In the design process the step from the conceptual stage to the physical is a most exciting one. Also the experience how the material, its characteristic and behaviour is influencing the design is essential for learning and understanding the design process. Physical hands-on will serve this experience. In this summer school the focus is on the intersection between the designer and the physical behaviour of the design. Topics will be modelling, experiences as well as building mock-ups.

PREPARATION

After the detailed evaluation of the BISS 2016 by its participants (students, teachers), the WP3 coordinator in cooperation with other project partners will prepare the enhanced framework and structure of the next summer school (2017) and present it during the interim partner meeting in Helsinki for further discussions and improvements.

The topics of the BISS 2017 will be formulated in more detailed and the experts as well as mentors for the summer school contacted. The internal workshops at each partner university will be carried out with selected participants in order to prepare “local inputs” for the summer school.

IMPLEMENTATION

The BISS 2017 will take place in Hamburg and last 10 days. A group of 54 participants from all partner universities representing the different disciplines of built environment will work in small working units under the supervision of interdisciplinary team of mentors and experts.

Students work on their project in groups of 4 following their own thematic focus. Small excursions will complement the studies. Each group will be free to choose their mode of their project outcome.

Discussions and the exchange of ideas with professors, research associates and other participants during and after classes will enhance the personal experience and bring best benefits to all participants.

The final projects of each student groups will be presented at the final event of the summer school within the attendance of invited experts and stakeholders from academic as well as non-academic sector: local authorities, industry, chambers, etc.

POST-PROCESSING

After the summer school in Hamburg the participants of the BISS 2017 will stay connected via digital platform and work further to prepare their group projects for documentation. Furthermore, each partner university will organize a post-processing workshop at their home university where the evaluation of the BISS will be conducted.

The coordinator of the WP3 will prepare the questionnaire as well as conduct several interviews with selected participants in order to evaluate the summer school and prepare the report. Based on the outcomes of the evaluation the suggestions on improvements and amendments for (1) the Methodological Guidelines, (2) Teaching Module will be prepared.

C8-C10: Baltic International Summer School (BISS 2018) in Hamburg

SCHEDULE: July 2018

AIM:

- to test and further develop the elaborated new teaching methods and formats; specially with the focus on peer-to-peer learning;
- to strengthen the competences, knowledge and skills of interdisciplinary interaction;
- to strengthen the cooperation between disciplines, cities and countries supporting the mobility and comprehensive interaction

TARGET GROUP: students in the disciplines of built environment of the participating universities

OTHER BENEFICIARIES: teachers, university society, non-academic stakeholders of the project

FOCUS (3) performing through social interaction

If designing the designer predicts a specific need, function or performance. Later the performance will be proven by the society; they either accept and appreciate the design or – in the worst case – will decline it. Actual major projects struggle, like the new railway station for Stuttgart 21, the new airport in Berlin or the philharmonics in Hamburg. As they also run out of budget the acceptance from society disappears. In fact the sceptic towards new projects and infrastructural developments increases as well as the demand for participation which has an essential influence on the design and the design process. This specific interaction will be focused in the last summer school.

In this thematic context also the methodical approach of peer-to-peer learning gets special attention. To underline this intellectual output O3 serves as preparation.

PREPARATION

After the detailed evaluation of the BISS 2017 by its participants (students, teachers), the WP3 coordinator in cooperation with other project partners will prepare the enhanced framework and structure of the next summer school (2018) and present it during the interim partner meeting in Helsinki for further discussions and improvements.

The topics of the BISS 2018 will be formulated in more detailed and the experts as well as mentors for the summer school contacted. The internal workshops at each partner university will be carried out with selected participants in order to prepare “local inputs” for the summer school.

In spring term 2018 interdisciplinary mixed students from each partner university will have a task to make short movies (see O3): (1) movies explaining a principle (educational character); (2) movies analysing a project, building structure (case study).

IMPLEMENTATION

The BISS 2018 will take place in Hamburg and last 10 days. A group of 54 participants from all partner universities representing the different disciplines of built environment will work in small working units under the supervision of interdisciplinary team of mentors and experts.

Students work on their project in groups of 4 following their own thematic focus. Small excursions will complement the studies. Each group will be free to choose their mode of their project outcome.

Discussions and the exchange of ideas with professors, research associates and other participants during and after classes will enhance the personal experience and bring best benefits to all participants.

Movies: After the first evaluation and discussion at the home universities, all movies will be showed, analysed and discussed during the BISS 2018 in order to debate the following points: (1) Differences and similarities in the approaches and focuses dealing with interdisciplinary topics of built environment in the Baltic Sea Region; (2) Transferability of concepts and solutions; (3) Peer to peer leaning as a method for interdisciplinary learning; etc.

The movies as well as the final projects of each student groups will be presented at the final event of the summer school within the attendance of invited experts and stakeholders from academic as well as non-academic sector: local authorities, industry, chambers, etc.

POST-PROCESSING

After the summer school a comprehensive evaluation of the event will take place: students and teachers will be asked to evaluate (1) the methods, (2) formats and (3) materials used.

The results of the summer school will be discussed, evaluated and added to the digital platform for the broader use. Furthermore, the printed documentation of the BISS will be prepared and presented at the final event in Tallinn.

WP4 – SOCIETY: relevance for society

COORDINATOR: Tallinn University of Technology

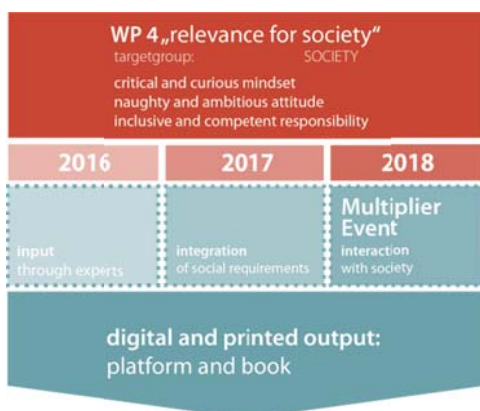
TARGET GROUP: Society (Multiplier event)

The AIM of WP 4 is to point out the relevance of this interdisciplinary project for society. With increasing complexity the intersection not only between the design partners like architects and engineers but also between the designer and society becomes more and more important. Actual major projects struggle, like the new railway station for Stuttgart 21, the new airport in Berlin or the philharmonics. Among others part of the problem is that mistakes are quite often detected too late and responsibilities are hard to define and assign. As a reaction towards these challenges designers need to question at all stages the relevance of their doing for the society. Thus designers and students who are going to be designers and thus influencing the build environment need to have (1) a critical and curious mind-set, (2) a naughty and ambitious attitude and (3) an inclusive and competent responsibility. Through the whole project the intersection with society will be examined and intensified. “Society” consists of multiple levels: it includes experts like for example established designers as well as officials in administration. It also includes the needs and requirements. And last but not least it includes the new and broad field of participation. Thus, these levels of intensity will be indicated by different interfaces throughout the project: At the beginning this will be more “one-way” through the input through experts. In the next step social and functional requirements will be reflected and included and the last step will be the interaction between the designers and society.

The OUTPUT of the WP4 is to create a DIGITAL PLATFORM for the interdisciplinary and intercultural exchange between the students, teaching staff, industry as well as other stakeholders from non-university society. For that purpose a THEMATIC CLUSTER “Intersections of Built Environment in Baltic Sea Region” will be developed. The continuous exchange and interaction dealing with complex topics will be enabled through a functioning interactive digital platform. The cluster will serve to all project target groups and strengthen the active cooperation between universities and countries. Furthermore the cluster will support mobility, joint teaching and research activities as well as provide new research topics. The project results will be provided on different channels. Moreover, a MULTIPLIER EVENT in Tallinn is going to be organized in order to disseminate the project outputs and to promote stronger dialogue between the academic and non-academic society.

Outcomes and events planned:

- (1) Interactive digital platform
- (2) Multiplier event in Tallinn with workshop for relevant stakeholders, including a printed book



ACTIVITIES WITHIN WP4

Activity15: Elaboration of the detailed WP4-plan

The Tallinn University of Technology as a WP4 coordinator in cooperation with project lead partner will develop a detailed WP4 plan where the activities, outputs, responsible and involved partners as well as timeframe for each activity will be set up. The WP4-plan will be presented, discussed and finalized during the kick off meeting in Copenhagen.

O4: Digital platform “Think the link” within the thematic cluster “Intersections of Built Environment”

A thematic cluster has to be lively to be up to date and to focus actual changes and challenges. Thus networking is an essential action within a cluster and networking needs technical support. Here, due to the geographic diversity, this technical support will be achieved with a digital platform.

SCHEDULE: during the whole project lifetime

TARGET GROUP: universities and non-academic sector acting within the disciplines/topics of built environment

The AIM of the digital platform as an important intellectual output is to create an interactive exchange platform for different stakeholders (project partners but also other / new partner) in the field of built environment in order to:

- 1) To inform about the project and its results to the broader public;
- 2) To ensure the sustainability of the cooperation between the project partners and to support their further joint activities;
- 3) To strength the interdisciplinary dialogue between the representatives of different disciplines and to support their collaboration;
- 4) To strengthen the network of actors in built environment in the Baltic Sea Region and in whole Europe;
- 5) To provide comprehensive information on tool and methods of interdisciplinary teaching in disciplines of built environment;
- 6) To give students the chance to explore and share interests and discover new knowledge through participation in joint activities, discussion boards and competitions;
- 7) To involve different stakeholders in the discussions on society relevant projects.

O4/A1: PREPARATION

Project partners will develop the clear structure of the website taking into account the input from other project stakeholders (involved non-academic institutions).

Depending on the target group, the website will have several sections as well as joint platforms where interactions between the different stakeholders can take place.

O4/A2: IMPLEMENTATION

Development and regular updates of the website. Regular feedback from the users on topics, use, utility, etc. All project partners will promote the website within their networks and put the link to the website on their home websites. All visibility activities and outputs produced will have a reference to the website.

(1) The platform will be used to get better know the partner universities and to promote the mobility actions e.g. through ERASMUS programmes) by placing the information on:

- Study programmes in disciplines of built environment available at each university
- Modules and courses in English language
- Interdisciplinary courses available
- Contacts to the local students and teachers
- Recognition instruments and procedures

(2) The platform will provide new research topics and serve for continuously exchange on different approaches of combining disciplines, contents of research as well as teaching traditions and processes.

(3) This digital platform will also allow the teachers in disciplines in built environment:

- to ease access to developed digital interdisciplinary materials used for teaching purposes
- to explore the potentials in integrating the web-based tasks actively in the teaching
- to create an interactive teaching tool for interdisciplinary teaching

(4) All teaching material developed within this project as well as the methodological guidelines and recommendations will be place on the website for broader usage.

(5) In order to strengthen the active cooperation and exchange between the academia and non-academic sector, several interactions within this platform (e.g. discussion boards, blobs, comments/critiques,...) are foreseen.

O4/A3: POST-PROCESSING

After the end of the project, the website will be further maintained by the project partners and used for other cooperation activities between the universities.

E1: Organisation of the multiplier event in Tallinn “Think the link – Intersections in built environment”

In August 2018 a multiplier event is going to be organized in Tallinn, Estonia. The overall aim of multiplier event is to disseminate the project results and elaborated intellectual outputs to the broader public in order to reach all relevant target groups and ensure the sustainability.

TARGET GROUPS:

- 1) higher education organization on the Baltic Sea region (others than the project partners)
- 2) non-academic society (local authorities, chambers, industry and business, other society groups (e.g. NGOs)) acting in the field of built environment
- 3) Associated project partners

PREPARATION

the following steps will be implemented by preparing the planned event:

- Set up the programme of event
- Prepare the workshop
- Contact the guest lecturers
- Invite the representatives of the relevant target groups

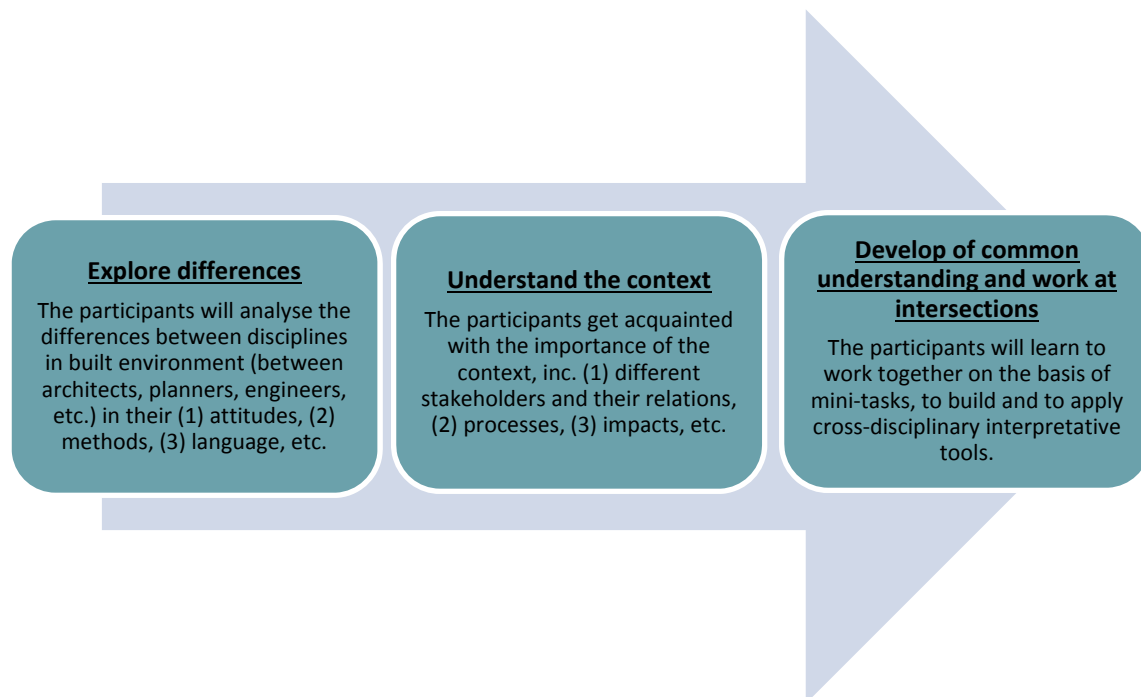
IMPLEMENTATION

During the event several activities are planned:

- Presentation on the project, its topics, goals and partners involved
- Presentations on the elaborated intellectual outputs
 - Guidelines for the teachers
 - New teaching module “Intersections in built environment”
 - Digital platform “Intersections of built environment”
- Workshop within the multiplier event
- Keynote lecture on interdisciplinarity in built environment (held by the well-known expert)
- Printed documentation of the project and working material for the workshop

Within this workshop all to the workshop registered participants will work in interdisciplinary and internationally mixed groups on the small scale real-world projects using during the project elaborated formats and methods.

The process in the working groups will be divided in the following steps:



POST-PROCESSING

All outcomes of the multiplier event will be documented and disseminated via digital platform and other channels.

A16. Promoting the dialogue between different stakeholders from Baltic Sea Region

In order to address the complexity of the issues in built environment as well as to exchange the knowledge and experiences all relevant stakeholders from academic and non-academic sector should come together.

During the whole project lifetime all project partners will actively promote a constructive dialogue between different stakeholders on local and regional level through: (1) Joint activities, (2) Consultations and joint events, (3) Dissemination activities, etc.

PROJECT SUMMARY

The THEMATIC APPROACH of this application focuses the COMPLEXITY of current urban conditions, actual chances and challenges; the traditional division of disciplines is no longer adequate. For example too often engineering focuses only on technical-economic aspects and architecture only on the aesthetical artistic ones, thus the holistic approach is neglected. Also many major projects struggle, like the new railway station for Stuttgart 21 or the philharmonics in Hamburg. Among others part of the problem is that mistakes are quite often detected too late and responsibilities are hard to define and assign.

Thus this COMPLEXITY requires cooperation and understanding between the disciplines. The basic for these needs to be implemented in education and a new TEACHING MODULE in higher education of built environment becomes essential. Also individual disciplines do not have the necessary capacity to develop the comprehensive understanding alone therefore interdisciplinary approaches are needed in order to frame and address the complexity of the praxis of contemporary built environment in general and the intersection between architecture and engineering in particular.

Consequently the overall goal of the project BeInterBaltic is to enhance the quality and relevance of higher education in Baltic Sea Region by improving and adapting the current curricula of built environment disciplines of participating universities. The project also aims (1) to develop and test NEW TEACHING METHODS and formats, (2) to equip the students with the INTERDISCIPLINARY and INTERCULTURAL COMPETENCES and skills, (3) to strengthen an interactive DIALOGUE between the universities and non-academic sector and (4) to promote and increase the COOPERATION between the universities in Baltic Sea Region.

The project consortium consists of 7 higher education institutions from six countries: (1)HafenCity University Hamburg, DE (Applicant), (2) Gdańsk University of Technology, PL, (3) Tallinn University of Technology, EE, (4) The Royal Danish Academy of Fine Arts. Schools of Architecture, Design and Conservation, DK, (5) Technical University of Denmark, DK, (6) Chalmers University of Technology, SE and (7) Aalto University, FI.

The project BeInterBaltic is structured in four interlinked and parallel progressing work packages (WPs). Within the WP1 successful project implementation and dissemination of the project outcomes will be ensured.

The AIM of the WP2 is to bring the teachers of disciplines of built environment together in order to evaluate existing and develop new methods as well as formats of interdisciplinary teaching. These methods and formats will include (1) physical and digital modelling, (2) drawing and film and (3) rhetorics and poetics, all of them focusing on chances and challenges of the build environment. Within this WP a WORKSHOP for teachers will be conducted and METHODOLOGICAL GUIDELINES for teachers will be developed.

WP3 includes a paradigm shift from the methods of teaching towards the students and their motivation of understanding. To intensify these motivation different aspects of designing in the context of the build environment and at the intersection of the disciplines will be applied: (1) analysing through patterns, (2) gaining insides through "hands-on" and (3) performing through social interaction. These aspects depend on another and develop the examination of the relationship between the designer and the design. Each of these steps will be addressed in one of the three SUMMER SCHOOLS which are the core activity in this WP. Within this WP the teaching material for a NEW TEACHING MODULE will be jointly developed.

The AIM of WP 4 is to point out the relevance of this interdisciplinary project for society. To meet the requirements of society students need to have (1) a critical and curious mind-set, (2) a naughty and ambitious attitude and (3) an inclusive and competent responsibility. The OUTPUT of the WP4 is to create a DIGITAL PLATFORM for the interdisciplinary and intercultural exchange between the students, teaching staff, industry as well as other stakeholders from non-university society. For that

purpose a THEMATIC CLUSTER “Intersections of Built Environment in Baltic Sea Region” will be developed. The cluster will serve to all project target groups and strengthen the active cooperation between universities and countries. Furthermore the cluster will support mobility, joint teaching and research activities as well as provide new research topics. A MULTIPLIER EVENT in Tallinn is going to be organized in order to disseminate the project outputs and to promote stronger dialogue between the academic and non-academic society.

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