

ECTP Strategic Research & Innovation Agenda

Call for Tender

Appendix 1 – Statement of Work

The *European Construction, built environment and energy efficient building Technology Platform* (ECTP), founded in 2004, is a leading membership organization promoting and influencing the future of the Built Environment and Construction sector in Europe and beyond. The main mission of ECTP and its Committees is to develop and implement new research, development and innovation strategies (RDI) to improve the competitiveness of the wider construction sector, meet societal needs and take up environmental challenges through an innovative and sustainable Built Environment. The ECTP is an industry-led stakeholder forum that is recognized by the European Commission as a key actor in driving innovation, knowledge transfer and European competitiveness, through research and demonstration to help shape a better future for the Built Environment in Europe.

ECTP uses strategic research and innovation agendas to determine the issues, challenges, barriers and drivers facing the Built Environment in Europe, helping to lead the way to industry growth and a more sustainable future. Innovation and improved competitiveness in the Built Environment sector are more than ever needed in order for Europe to compete in the international market.

In this context, and building on previous exercises and achievements, including:

- the existing [EeB PPP Multiannual Roadmap](#), in line with the long term ECTP vision over 2014-2020;
- [REFINET SIP \(Strategic Implementation Plan\) Roadmap](#);
- the [2019 ECTP Position Paper](#) and the associated Position papers to the various ECTP Committees (available at www.ectp.org/resources/publications/),
- European and international studies and reports from other stakeholders: BPIE, JRC,

and in the context of the preparation towards the upcoming next European R&D Framework Program (Horizon Europe – HEU), the ECTP Association is starting a process to identify RDI priorities for the period 2021-2027, taking into account the advancements in the state of the art and the results emerging from the research, demonstration and innovation projects which have been previously launched, in particular within the EeB PPP initiative ([EeB PPP Project Review 2018](#)) and wider EC funding (e.g. ECCREDI/ECTP project list).

The new ECTP ***Strategic Research and Innovation Agenda (SRIA)*** should answer the following key questions – keeping in mind that SMEs consistently form around 95 % of existing industry:

- What are the trends and drivers for the future?
- What is the current State-of-the-art, both in terms of innovative technologies and systems, and their implementation on the market?
- What barriers and challenges do we foresee on the road(s) to a future smart, sustainable and resilient built environment, and for the enhancement of the Construction process?
- What is needed in order to overcome the barriers and take up the challenges?
- What are the upcoming R&I topics and targets that must be tackled, and what are their priorities?

In this framework and based on the previous achievements of the ECTP and its Committees, as well as the EeB cPPP, the main objectives are described through the following tasks:

- Synthesise a vision towards a smart, sustainable and resilient built environment – delivering a shared and integrated vision for the ECTP SRIA among ECTP members and main stakeholders as well as identified European associations in the Construction and related sectors, relying on key targets built on EU and national/regional initiatives, and encompassing areas like energy, comfort, health, circular economy, cultural heritage, etc.;
- Identify trends and drivers for the future, to exhibit implications for the built environment, market threats and opportunities and to integrate those views with existing scenarios and national and international roadmaps. An analysis of major position papers and relevant forthcoming EU legislation shall be investigated to evaluate their possible development in a new set of scenarios. Quantified targets should be derived for which fulfilment of novel integrations of existing technologies or completely new technologies would need to be developed;
- Identify priority areas for detailed technology roadmapping: based on the quantified targets identified above, priority areas will be identified as building pillars of a new multiannual ECTP SRIA and for which new research, innovation and demonstration would be needed to overcome both technological and non-technological barriers. A specific emphasis will be made on the need to make it possible for technology to be implemented successfully on site by SMEs and microenterprises.

1. BIDDER'S EXPECTED TASKS

In order to achieve the different objectives as described in the previous paragraph, the bidder will support ECTP in developing a detailed technology and implementation roadmap for each of the identified areas, interviewing groups of experts engaged through ECTP or creating consensus among larger stakeholders groups (through appropriate organised workshops), based on a methodology that is to be clearly identified and described in the submitted tender.

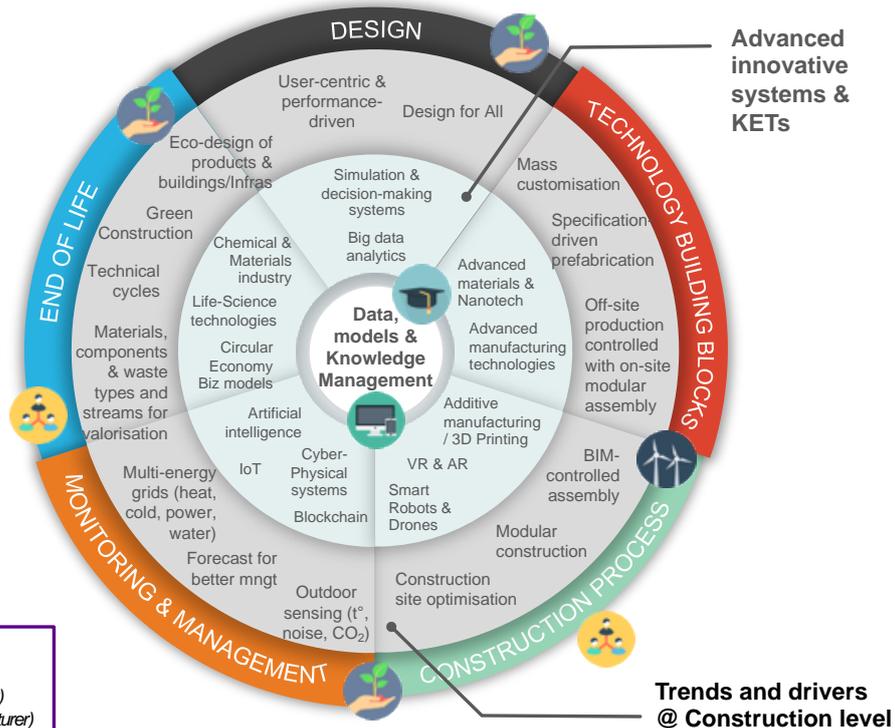
The bidder has to support in the integration of the different target and priority areas level onto a set of coherent priorities, for a future research programme with a time horizon till up to 2030. It is expected that the work starts from and relies on the revisited Construction value chain as it has been introduced in the 2018 ECTP Position Paper, and exhibited herein after:

Main enablers for a competitive Construction eco-system

- Generalised Digitalised platforms and Apps for construction projects
- Seamless integration of innovation (materials, components, systems)
- Engaging all actors in sustainable development and impact
- Trained and skilled labour force & high quality employment and working environment
- Mobilising the financial resources for massive investments in knowledge

Technical cycles

- *Maintain (Customer)*
- *Refurbish / Remanufacture (Provider)*
- *Reuse / Refurbish (Product Manufacturer)*
- *Recycle (Part Manufacturer)*



Some basic guidelines on the expected outputs of this work are illustrated in the two following paragraphs. Nevertheless, the bidder should feel free to extend, fine-tune or propose alternative methods, according to his experience, as long as the expected outcome is reached.

Task 1: Developing an integrated Technology and Implementation Roadmap for the Identified Priority Areas

The overall targets for research and demonstration identified in the context of ECTP will be translated onto specific objectives for the priority areas identified within ECTP:

- Gaps and performance targets;
- Available technologies and gaps that need to be overcome with new developments;
- Elements and topics of a future research programme including level of resources and timeline, and identifying existing initiatives that could address these areas as well as in full synergy (e.g. for the Energy topic, the [SET-Plan](#), the [EPBD Directive](#), the International Energy Agency initiatives, etc.); This exercise should also include an identification of topics especially dedicated to promoting the development and adaptability of technologies oriented to SMEs and micro-enterprises.
- Description and analysis of the value and specific innovation chains to identify the actors that need to be mobilised;
- Capture of the interdependencies to foster systemic approaches, digitalisation, etc.

It is envisaged that dedicated working groups (with interviews, workshops, meetings, etc...) shall be formed with a balanced participation of industry practitioners and participation of SMES, researchers, coming from ECTP as well as other European associations. This work shall rely on a process including asking for background documents that each association identifies as being of interest for references to the future SRIA, interviewing key experts in each domain (a tentative number of around 50 interviews is envisaged), and the achievement of overall 3 workshops is envisaged and has been considered for the identification of the contract maximum value. However, this approach can be critically reviewed by the bidder and any alternative approach can be presented in the technical proposal.

Task 2: SRIA fine-tuning and finalisation

The final stage of the roadmapping process will consist in this task in the final assembly and fine-tuning of the various priorities of the SRIA being carried out. All comments, additional inputs from the stakeholders, and potential new or revisited priorities will be gathered together, identifying the overall outcomes by combining all the areas and identifying the remaining gaps in responding to the opportunities and market needs, and fill these in.

The expected outcomes of this activity are:

- Summarise and integrate all inputs from final working groups activities, articulating ultimate value and outcomes;
- Highlight and articulate the role of ECTP stakeholders (and from other identified associations) in each area, including how to ensure the active participation of SMEs;
- Capture other areas outside the direct scope of ECTP that may be covered by complementary programmes (e.g. green vehicles and link to e-mobility, smart networks, industrialisation aspects, etc.);
- Include a detail explanation of each key topic at the level of Research and Innovation (RDI) Programme, indicating those specially oriented to meet the needs and enhance the participation of SMEs.

The bidder should note that this structure is not compulsory, and therefore alternative structures or methods may be suggested, as long as all elements of the roadmap are clearly presented and integrated.

2. CONTRACTUAL, MANAGEMENT AND ADMINISTRATIVE CONDITIONS

2.1 Type of Contract

This is a contract for supporting and facilitating the process of defining a SRIA to be undertaken by ECTP during this year 2019. The whole SRIA roadmapping process shall respect the general requirements proposed by ECTP, as detailed in this statement of Work.

2.2 Terms of Payment

The expected cost will depend on the proposed works but is not foreseen to exceed 65.000 € (excluding VAT). This amount includes travel and accommodation costs as well as any specific cost incurred by the bidder while performing the tasks identified in previous chapters.

The payment scheme will be:

1. Pre-financing of 20 % at signature of the contract between ECTP and the bidder;
2. One interim payment of 50% at the end of Task 1 activities and upon acceptance of deliverable D1.
3. Final balance of 30 % at the delivery of the final SRIA and upon acceptance of deliverable D2.

The payments are subject to approval of the output work performed by the Contractor.

The type of price is to be considered firm and fixed.

2.3 Length and Language of the Proposal

The tender proposal shall be concisely written in English. The proposal should contain at least:

- a critical review of the tender requirements;
- the proposed work programme and its logics;
- the proposed deliverables;
- the bidder qualifications and the CVs of the involved persons, including the clear identification of the person responsible (team leader) for the achievements of this contract;
- the breakdown of the quotation.

A simple guideline is that the total number of pages shall not exceed 25. The quoted number of pages does not include standard company information or brochures which the bidder wishes to append to demonstrate its background and experience.

2.4 Personnel

The contractor shall assign adequate personnel resources for the implementation of the activity. CVs of all the personnel involved shall be supplied. Key personnel are defined as persons who, because of their individual qualifications and positions, are proposed for the work and indicated as such in the bidder's organigramme. Each person proposed should have at least 4 years' experience in technology roadmapping for public and/or private clients, with the team leader having at least 8 years' experience.

For each key person identified, the bidder shall:

1. Provide a comprehensive curriculum vitae, giving in particular evidence to the work: experience of the person concerned, a brief description of the person's present job and responsibilities and a detailed description of the latest assignments in the area of technology roadmapping;
2. Indicate his position in the bidder's organisation;
3. Provide the % time dedication to the present activity;
4. Provide the dedication to the present activity, in man/ hours, broken down per task.

The team appointed by the bidder will work under the coordination of the ECTP Steering Committee, the EeB cPPP Co-chair and the Secretary General of ECTP, including both technical activities and contractual formalities. Based on the proposed approach, direct contacts may be envisaged between the bidder and the members of the Steering Committee, as well as between the bidder and the ECTP Committees' chairs, who are ECTP Vice-presidents. The bidder is expected to critically review this basic approach and present its proposed project management structure including how to manage risks and conflicts.

2.5 List of Deliverable Items and Reports

The Contractor shall provide monthly progress reports by email summarising the tasks performed and pointing out if any problem arises.

2.5.1 Final report

A final report shall be produced. It shall be a complete statement of all the work done during the study, properly integrating main achievements in deliverables D1 and D2. It shall be self-standing, not requiring to be read in conjunction with reports previously issued. It shall contain all the results of the roadmapping study (to be typically 50 to 150 pages).

The draft versions of the Final Report shall be submitted for approval of ECTP not later than two weeks before the end of the contract (Final Review).

2.5.2 Executive summary

An executive summary shall also be produced at the end of the study. It shall contain a summary of the work done and include the main findings and conclusions. It shall be written in a concise yet instructive manner and shall not exceed six (6) pages. It shall include photographs, diagrams and pictures as applicable and shall include all information useful for dissemination purposes, and as a consequence no proprietary information shall be included in the Executive Summary.

The Table shows the summary of the expected Deliverables.

Table 1: List of Deliverables

Num.	Deliverable	Deadline	Task
D1.1	SRIA – complete draft version	June 2019	T1
D1.2	Intermediate report	June 2019	T1
D2	Final SRIA report	October 2019	T2
D3	Final report + Executive summary report	October 2019	All
D4	Final representation	October 2019	All

2.6 Background Experience of the Company

The bidder shall describe its relevant experience for the performance of the work which is subject of the present Call for Tender –including a table providing a list of the last three years contracts in areas which are relevant to the tender needs, including the value of the contracts, the clients, and duration. Training activities may be considered but are not the core of the expertise ECTP is looking for.

The bidder shall demonstrate expertise and experience in elaborating methodology and criteria for roadmapping activities and shall present background experiences in this regard.

The bidder shall demonstrate ability and experience in accessing the information required for this activity, excluding any potential conflict of interests with the actors of the value chain. Furthermore, the bidder shall demonstrate understanding of the ECTP activities.

2.7 Facilities

The bidder shall submit a brief description of all facilities which are proposed to be used for the work offered. For the purposes of this provision facilities include hardware / computer software / manufacturing and test equipment / computers / word-processors, etc.

The bidder shall also describe which means of access to information resources, such as libraries, data banks etc. it has, if these are required for the work proposed.

2.8 Work Breakdown Structure

With respect to the work definition given in the Statement of Work, bidders shall propose the relevant Work Breakdown structure and Tasks Descriptions down to a reasonable level of detail. Descriptions of Tasks shall contain all the required information with particular attention to the input, task description and output fields.

A Pert diagram presenting the interrelations of activities and work logic needs to be provided.

With respect to the standard requirements for management, reporting, meetings and deliverables, the bidder shall include a Work Package for Management and Reporting in his proposal. All management tasks, such as meetings, progress reports and final documentation shall be carried out under this Work Package.

2.9 Planning

The main milestones foreseen are as follows:

- By 12th of April 2019 at the latest: appointment letter to the selected organisation and signature of the contract;
- Task 1: April – June 2019;
- Task 2: July – October 2019.

The expected total duration of the Contract shall not exceed **8 months** from kick-off to the end of the activity (delivery of approved final SRIA).

The bidder shall submit its planning proposal in the form of a Gantt Chart. The Gantt Chart shall duly reflect the relevant Tasks title and number as per Work Breakdown Structure and Tasks Description.

In establishing this planning, the bidder shall take account of the need of the ECTP Association and relevant bodies (i.e. Scientific Committee, Executive Board...) and multipliers (i.e. National Liaison Points ...) to review and/or approve intermediate deliverables and shall include 2 weeks' time for the Association to do this.

2.10 Cost Price Data

The bidder shall present:

- the Price Breakdown Form for each of the participants;
- Manpower & Price Summary at Task Level;
- Price according to the Work Breakdown Structure Price by Contractor in EURO

The bidder shall submit a summary table showing the prices in EURO.

The bidder shall identify the budget allocated to travels to join meetings or other data according to the following paragraph requirements.

2.11 Travel and Subsistence Plan

It is envisaged that workshops and meetings will be in Brussels at the premises of ECTP. The bidder shall submit a brief description of the travels envisaged for the execution of the Contract together with the related cost details – under an appropriate tabular form, e.g.:

Task	Purpose of trip	Means of transport	Travel cost/person/trip	Subsistence rate/day	Total cost travel	Total cost Subsistence

2.12 Subcontracting

On case the bidder envisages to rely on some external sub-contractor(s), the maximum amount of subcontracting is 20% of the overall cost. The requirements in terms of experience and qualifications (previous projects...) of the team should be fulfilled by the bidder without contribution of the subcontracted organization(s).

2.13 Background Proprietary Information

The offer shall present briefly which proprietary background information or knowledge, if any, the bidder intends to use for the activity.

2.14 IPR Ownership

The intellectual property rights of all results and reports derived from this activity will be entirely owned by ECTP.

2.15 Evaluation Criteria

When evaluating the proposal(s), ECTP will use the criteria as detailed in Table 2.

Table 2: Evaluation Criteria Weights

	Evaluation criteria	Weighting factor
1	Background and experience (general and related to the particular field concerned and tender) of the company(ies) and staff (including adequacy of proposed facilities), demonstrating clear avoidance of conflict of interests.	30%
2	Understanding of the challenges in elaborating the expected SRIA in the given time frame, reaching consensus across stakeholders; compliance with the technical aspects of the Statement of Work; quality of the proposal.	40%
3	Adequacy of planning, management and costing for the execution of the work	30%