

ERA-NET: Aligning national/regional translational cancer research programmes and activities TRANSCAN-2

Joint Transnational Call for Proposals 2016 (JTC 2016):

“Minimally and non-invasive methods for early detection and/or progression of cancer”

Guidelines for Applicants¹

Submission deadlines

Pre-proposals: 13th February 2017 at 16.00 CET

Full proposals: 7th June 2017 at 16:00 CEST

Useful links

https://secure.pt-dlr.de/ptoutline/app/transcan_2016 (available from 2nd December 2016)

For further information, please visit

www.transcanfp7.eu or

Contact the **Joint Call Secretariat (JCS)** at:

The Dutch Cancer Society (KWF kankerbestrijding)

E-mail: transcan_jtc2016@kwf.nl

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¹ "Please note that a correction regarding the maximal length of the pre-proposal is reported on page 4, article 4"

1. BACKGROUND

Under the umbrella of TRANSCAN-2 (ERA-NET: Aligning national/regional translational cancer research programmes and activities), 23 funding organisations have agreed to launch a Joint Transnational Call (JTC) in 2016 for collaborative research projects on **“Minimally and non-invasive methods for early detection and/or progression of cancer”**. The participating TRANSCAN funding organisations emphasise the promotion of innovative interdisciplinary collaboration and truly translational research projects.

The research projects submitted within this call will be based on novel ideas stemming from consolidated previous results and will be endowed with a strong translational research orientation. Project proposals must clearly demonstrate the potential health impact as well as the added-value of transnational collaboration. The sharing of relevant results, data sets and/or resources within international research consortia will be a prerequisite for funding. The research proposals should be built on an effective, multidisciplinary and multi-professional collaboration between academic, clinical, epidemiological or public health research teams and industry. Researchers' exchanges within the consortium are strongly encouraged.

In order to ensure target-oriented projects, the availability of and/or access to clinical biomaterial banks (cells, tissue, blood, DNA, organs, fluids etc.) and the related clinical data of subjects (patient cohorts with comprehensive clinical documentation and characterisation) must be secured and explained. Respective biomaterial banks must be maintained with "Standard Operation Procedures" (SOPs for extraction, transport, processing, storage and further usage) and previous use and benefit documented by respective publications.

Applicants may consider to consult the Early Cancer Detection Europe network (ECaDE : <http://eatris.eu/projects/ecade>) for procedural and methodological support. ECaDE identified commonly made pitfalls in biomarker validation concerning the analytical processes, sample selection, quality assurance, and methodological design.

2. PROPOSAL SUBMISSION

TRANSCAN-2 JTC 2016 will be implemented through a two-stage submission procedure: pre-proposals and full proposals. In both cases, a single document, written in English, should be prepared by the partners, and must be submitted electronically to the Joint Call Secretariat (JCS) by the project coordinator, using the application forms provided within the electronic submission system after registration (https://secure.pt-dlr.de/ptoutline/app/transcan_2016). Some fields (in particular the project abstract and budget information) are also mandatorily requested to be filled online via the electronic system (Please ensure that information of the application forms and online data are consistent). Original signed versions of either pre- or full proposal are not required. Scanned signature pages are mandatory in the full proposal.

All the required annexed documents (e.g. diagram and figures, signature pages) must be included in the unique PDF document (separate upload of different document is not technically possible via the electronic submission). Joint full proposals will be accepted only from applicants explicitly invited by the JCS to submit them.

Both pre-proposals and full proposals must be submitted to https://secure.pt-dlr.de/ptoutline/app/transcan_2016 within the deadlines indicated below.

For pre-proposals submission, the system will open on the 2nd of December 2016. Pre-proposals must be submitted to and received by the JCS no later than 13th of February 2017 at 16.00 (Central European Time, CET).

For full proposals submission, the system will open on the 26th of April 2017. Full proposals must be submitted to and received by the JCS no later than 7th of June 2017 at 16.00 (Central European Summer Time, CEST).

Call deadlines will be strictly enforced and the electronic system will not allow submissions after call deadlines. Please take into account that the online data entry may be overloaded on the day of the deadline. It is therefore recommended to upload all the required material in due time.

3. ELIGIBILITY CHECK

Prior to submitting the proposal, applicants should refer to the national/regional eligibility criteria and requirements (see Call text, Annex 4) and should contact their respective national/regional funding organization contact persons for additional clarifications (see Call text, Annex 1).

NOTE: An eligibility check before the pre-proposal submission is mandatory for the following funding organization. Please get in touch with the national contact point:

- ***The Ministry of Health (MoH), Italy***
- ***The Scientific and Technological Research Council of Turkey (TÜBİTAK), Turkey***

The JCS will assess proposals to ensure that they meet the call's formal criteria, e.g. date of submission; number of research groups/countries, type of project partners (academic, clinical/public health and industrial/SMEs), document length, and inclusion of all necessary information in English. In parallel, the JCS will forward the proposals to the relevant TRANSCAN-2 national/regional funding organizations that will perform a formal check for compliance with their respective eligibility criteria. Proposals passing both checks will be evaluated by independent international scientific experts.

Please note that after submission of the proposal it is not possible to amend it or to add further documents.

Participants from Turkey should also submit their proposals in Turkish to TUBITAK electronically via uidb-pbs.tubitak.gov.tr by 6th of February for pre-proposals and no later than 1st of June for the full proposal stage. The signed hard copy should be sent via regular mail within one month after the deadline.

4. PRE-PROPOSAL STRUCTURE

One joint pre-proposal document (in English) shall be prepared by the partners and must be submitted to the JCS by the project coordinator.

Please note that it is mandatory that the applicants use the pre-proposal application form, a fillable PDF file, provided within the electronic submission system (https://secure.pt-dlr.de/ptoutline/app/transcan_2016), and that the pre-proposal document respects the format (Arial font, size 11, DIN-A4, single-spaced, margins of 2.5) and the length indicated for each section (maximal length 30 pages). Pre-proposals not complying with these rules will be rejected.

Pre-proposals must include the following information:

- 1a. **Project title** (maximum 150 characters including spaces)
- 1b. **Project acronym** (maximum 10 characters)
2. **Project duration** (maximum 36 months)
3. **Name and full affiliation of the project coordinator** designated by the consortium to act as its representative.
4. **Names and full affiliations of the principal investigators** (only one per partner). Please note that a consortium must not exceed the number of 7 partners (comprising the project coordinator) with the exception of consortia including partners from Estonia, Latvia and Slovakia; in such cases the number of partners can reach a maximum of 10.
5. **Total requested funding** (€).
6. **Keywords**. Please indicate three to seven keywords representing: the scientific content [(type of cancer; specific aim(s) and topic(s) (see Call Text, chapter 2. Aim of the call)]; the methodological and technological approach(es).
7. **Project abstract** (maximum 400 words).

The abstract should contain:

- Background, rationale
- Hypothesis
- Aims (primary and secondary)

- Methods
- Expected results and potential impact

8. Adherence of the proposal to the scope, aims and specific topics of the call (tick boxes)

Aim 1 Risk stratification to divide groups on susceptibility for development or progression of cancer based on molecular biomarkers and established cancer risk factors:

- Risk stratification for cancer development
- Risk stratification for cancer progression

Aim 2 Validation of multiparametric methods, using the combination of promising biomarkers to improve our capability for early detection or progression of cancer:

- Molecular tumour markers
- Imaging techniques
- Bioinformatics techniques

Aim 3 Improve clinical evidence of minimally invasive methods:

- Analytical validity,
- clinical validity,
- clinical utility,
- Ethical, legal, and social implications (could also be considered)

9. Project description (max. 5 pages)

This part should contain:

- a. Description of the project rationale, in terms of medical need, and of the present state of the art in the field(s). Description of the envisioned solution for the medical need. Description of a summary of the relevant literature;
- b. Description of the project aims;
- c. Statement of the research hypothesis(es);
- d. Preliminary data;
- e. Description of the methods with specific regard to the study design, the study population(s), intervention/exposure, groups of comparison, and outcome of interest. Details are also needed regarding the study sample size as defined by *ad hoc* power calculations, and the strategic plan for statistical analysis;
- f. Novelty and originality of the project;
- g. Feasibility of the project: information about the experience of the research consortium partners in the field; management structure and related implementation plan; added value of the proposed transnational collaboration;

- h. Working plan (explain briefly how the activities are divided across different work packages and how the work packages are interconnected) and project schedule (e.g. Gantt chart, example see annex 1) ;
- i. Information about the potential impact on early detection and/or progression of cancer with reference to the development, dissemination and use of project results.
- j. References (one page maximum)

As annexes, to be included in the single pdf document, it should contain:

- Diagrams and figures (one page maximum, as a separate pdf file)

10. **Capacity building activities** (if eligible for the funding organization/country) (maximum 300 words). Please specify whether the project will include capacity building activities. If so, please describe the nature and purpose of the planned activities taking into account information described in section 2.2 of the Call Text. The budget will have to be mentioned in the financial plan (sections 12 and 13) in the appropriate line.

11. **Brief CV for each research partner** (i.e. the project coordinator and each principal investigator) including a description of the main domain of research and a list of the five most relevant publications within the last five years regarding the proposal (max 1 page for each partner).

12. **A global financial plan of the project** (budget broken down per partner) **Please describe the requested budget only. (Please note that eligibility of costs is subject to national rules and regulations: refer to Annex 4 of the Call Text).**

13. **Individual financial plans:** a financial plan per partner and budget justification **(Please note that eligibility of costs is subject to national/regional rules and regulations: refer to Annex 4 of the Call Text).**

14. **Reviewers** (if any) to be excluded from the evaluation of the proposal (up to five). Please note that this information is not compulsory. The CSC will consider these suggestions as it sees fit.

15. (If applicable) **Written confirmation that the partner with own funding** (also from other countries not partners in the JTC 2016) **has secured his/her funding.**

5. FULL PROPOSAL STRUCTURE

The information given in the pre-proposal is binding. Thus, any fundamental changes between the pre- and full proposals, e.g. composition of the consortia, objectives of the project, must be communicated to the JCS with detailed justification and will only be allowed by the Call Steering Committee (CSC) under exceptional circumstances.

Please note that it is mandatory that the applicants use the **full proposal application form** provided within the electronic submission system (https://secure.pt-dlr.de/ptoutline/app/transcan_2016), and that the full proposal document respects the format and the length indicated (maximal length 60 pages

(80 pages in case of a study/clinical trial)). **Full proposals not complying with these rules will be rejected.** Full proposals must include the following information:

- **Project title** (max 150 characters, including spaces) and acronym (max 10 characters).
- **Project acronym** (max 10 characters).
- **Project duration** (in months).
- **Total requested funding.**
- **Keywords:** Please indicate three to seven keywords by using the [MeSH](#) vocabulary representing: the scientific content [(type of cancer; specific aim(s) and topic(s) (see Call Text, chapter 2. Aim of the call)]; the methodological and technological approach(es)
- **Publishable project abstract** (maximum 400 words).

(Please note that if your proposal is selected for funding, the abstract will be published on the TRANSCAN-2 website).

The abstract should contain:

- Background, rationale
 - Hypothesis, i.e., the hypothesis/es to be tested.
 - Aims (primary and secondary), i.e. a description of the study aims either primary or secondary, with a maximum of 3 aims (including both primary and secondary).
 - Methods, i.e. a description of the methods applied.
 - Expected results and potential impact
- **Names and full affiliations** of the project coordinator and each principal investigator partner in the research consortium.
 - **Project description:** This section represents the scientific “core” of the project. The applicants are requested to provide elements on the study characteristics in a more detailed fashion compared to what previously reported in the homonymous sections of the pre-proposal application form and abstract.
 1. **Background and rationale** (maximum 600 words), i.e. a description of the medical need and present state of the art in the research field. Description of the envisioned solution for the medical need and a summary of the relevant literature;
 2. **Preliminary results obtained by the consortium members** (maximum 500 words, Figures related to the preliminary results).
 3. **Specific aims, research hypothesis and preliminary data, experimental design and working plan** (maximum 2000 words). This section should contain:
 - a. Project specific aims (maximum of 3, either primary or secondary). Please list the specific aims of the proposal, not to be confused with the aims of the call.
 - b. Research hypothesis and supporting data. Supporting (otherwise defined “preliminary”) data are not intended as literature-based evidence, unless such evidence is either

authored (i.e., one of the applicants is the first, last and/or corresponding author) or coauthored (i.e., one of the applicants is part of the authorship in any position but the first, last and/or corresponding author) by one or more of the applicants. These data are meant to have been generated by research activities carried out by one or more of the members of the consortium. More specifically, the project under evaluation has to be part of a research pipeline in course of development and the applicants have to exhibit a substantial role within such research pipeline.

- c. Experimental design, i.e. the strategy that directs researchers towards the study aim(s). Please ensure consistency between each of the project aim and the corresponding experimental design.

Experimental Design AIM 1

Experimental Design AIM 2 (if applicable)

Experimental Design AIM 3 (if applicable).

- d. Working plan, including a general overview of the entire consortium, and the rationale of the work packages, i.e., one or more subset/s of the entire study tasks assigned to one or more specific partner/s for execution. Task assignment will obey to rules dictated by the specific expertise of the consortium members and the way they complement each other within the study proposed.
- e. Synthetic description of the work plan at the work package level: please, fill the fields in accordance to the column headings.

4. Methods, power calculation and statistical analysis, expected outcome and risk analysis

(Maximum 1200 words).

- a. Methods: this section should include a detailed description of the study methods. To this aims, details on the following issues are required:
- i. Study Design: the applicants are requested to be clear about the type of study being proposed. Most commonly, the proposals will fall into one of the following two main categories i.e., (i) observational study or (ii) intervention trial. Once the main category has been defined (i.e. observational or intervention study), further elements will help characterize the study design.
- If an observational study is proposed, the applicants will be required to add specific details on whether the study is conceived as prospective, retrospective or mixed and whether by design is intended as a cohort, case-control, case-control nested within a cohort or cross-sectional study. For studies with a mixed design, the applicants are requested to be clear about which parts of the study will be retrospective (i.e. based on patient data already collected and stored biological specimens), and which will include patients (and their specimens) to be recruited prospectively; and indicate the number of patients (or samples) in each of these groups.

Since observational studies are particularly prone to confounding and bias, these aspects will have to be carefully considered when designing the study and, later on, carefully addressed in a dedicated section of this application, i.e., section d., namely, “Contingency plan including potential bias, anticipation of problems and possible solutions”. Since possible solutions to confounding and bias may derive by an appropriate use of the statistical tools, the applicants may refer to these issues also in the statistical analysis section, i.e. section 16. If an intervention trial is proposed, please complete section 17, clinical trial description.

- ii. Study population(s): Study population(s) should be described exhaustively, i.e., based on clearly stated inclusion and exclusion criteria.
 - Intervention/exposure: Clearly describe the interventions, and how they will be administered to patients within the trial. Please specify the drug dose and mode of administration, and the use of additional intervention(s) if applicable.
 - Outcome of interest: Clearly define all important endpoints (outcome measures), which, in clinical trials, will usually include efficacy, safety (toxicity) and compliance (adherence) to the interventions. Specific details on the procedural aspects will be added depending on the adherence of the proposal to the specific scopes, aims and topic of the call, as specified in the pre-proposal application, section 9, i.e., “Adherence of the proposal to the scope, aims and specific topics of the call”. If questionnaires will be used (for example to obtain information on lifestyle characteristics), please state whether you will be using established and validated ones, or developing your own. Details have to be provided regarding the planning for the management and retention of biological samples, specifying whether cooperation with existing or creation of new biobanks is envisaged.
- b. The proposed sample size has to be clearly supported in terms of power calculation. Sample size statements should be clear, unambiguous and capable of being replicated by a reviewer. Therefore, provide all the necessary quantitative information used for the sample size estimate; and make sure that the target sample size and (when relevant) number of events are likely to be achievable in the study time frame. With specific regard to studies with a mixed design, the applicants are required to be clear about which parts of the study will be retrospective (i.e. based on patient data already collected and stored biological specimens), and which would include patients (and their specimens) to be recruited prospectively; and indicate the number of patients (or samples) in each of these groups. If questionnaires will be used (for example to obtain information on lifestyle characteristics), please state whether you will be using established and validated ones, or developing your own. For clinical trials, this section

is expected to include referrals to the number of patients to be assessed for eligibility, to be allocated to the trial arms, the expected rate of loss to follow-up. Feasibility of recruitment is a key issue, thus the applicants are requested to provide evidence that the intended recruitment rate is achievable and specify whether and how the collaboration with the partners in the research consortium will facilitate the recruitment. Please specify the plans for monitoring of recruitment and contingency planning for recruitment problems. It is important that the statistical analyses section in the proposal is correct. It is strongly recommended that applicants work closely with colleagues such as medical statisticians or bioinformaticians, who have sufficient knowledge/expertise in study design, i.e. clinical trials and/or observational studies, including studies of prognostic markers (when appropriate). Applicants should be aware that reviewers are likely to take confused statistical statements and incorrect use of terminology as an indication that statisticians have not been involved closely in the planning. The lesson is that genuine, not token, involvement is needed (where a statistician or bioinformatician simply 'approves' the design before submission, without evaluating it carefully). With specific regard to clinical trials, interim analyses and stopping rules have to be anticipated and appropriately motivated. For studies which involve different cancer types or major subtypes, the applicants should consider describing how the different types will be handled in the statistical analyses.

- c. A referral to the expected outcome has to be included. In specific regard to the intervention trials, this section has to include some justification for the expected treatment outcome.
 - d. Contingency plan: Please describe which problems or risks you may face in executing the project plan and which anticipating actions you will take to make sure your project will run efficiently. Consider for example accomplishment of the specific research objectives of the study, depletion of biospecimens, achievement of critical data end points, discontinuation of participation by human research participants, possible bias regulatory aspects, or future funding.
5. **Novelty and originality of the proposal** (maximum 300 words). The applicants are requested to underline the importance of their proposals in terms of novelty and originality.
6. **Project feasibility, consortium governance and management of project coordination** (maximum 600 words). This section should include:
- a. A description of the infrastructures and resources relevant to the implementation of the work plan, concept of data and material acquisition and storage, availability of biological resources, data management and elaboration.
 - b. A description of the research consortium governance and management as well as of project coordination. This should include: i) a description of the governance and management structure and of project coordination planning (meeting, monitoring, etc.);

- ii) an outline of responsibilities and project effort (expressed in person months) of each participating research group per work package.
 - c. A description of the data principles, such as storage, accessibility, exchange, and reusability of scientific data and ownership of the data. Please adopt the FAIR data principles.
7. **Potential impact in reference to the development, dissemination and use of the project results** (maximum 400 words).
8. **References** (maximum of 30 references).
9. **Timeline and milestones** (maximum 300 words). This section should include a graphic representation of the project time plan and the milestones (Gantt chart, example see annex 1) on a 12-month basis, that is, at 12, 24 and 36 months. A milestone is a critical point in time to ascertain that sufficient and successful progress has been made in the project. To be included in the single pdf document.
10. **Diagram which compiles the work plan, the contribution of the partners to each work package and their interactions** (PERT diagram, example see annex 2, to be included in the single pdf document.).
11. **Added value of the collaboration in the proposed transnational project** (maximum 500 words). This section should describe the quality of the transnational research consortium, illustrating:
 - a. the level of expertise of the individual partner research teams in the field(s) of the proposal (team scientific track record, publications, patents, etc.);
 - b. the quality of the collaboration between the research teams and added value of the research consortium with respect to the individual team.
12. **Description of past and ongoing research projects of each participating group related to the present topic.** Specify in the table the funding or co-funding sources (include at least: title, ID number, amount and duration of funded project, correlation to the requested proposal, funding agency). Participation of at least one of the research partners in former TRANSCAN calls (JTC 2011, JTC 2012, JTC 2013, JTC 2014, JTC 2015) when applicable.
13. **Description of existing or potential patents (own or third party) and present/future position with regard to intellectual property rights, both within and outside the consortium (i.e. freedom to operate, barriers to sharing materials or results), if applicable** (maximum 500 words).
14. **Ethical and legal issues** (maximum 500 words). Ethical and legal issues, according to national/regional regulations, if applicable (e.g. informed consent, data protection, material transfer obligations, use of animals)
15. **Brief CVs for each research partner** (maximum 600 words, equivalent to about one A4 for each partner), including a description of the main domain of research and a list of the five most

relevant publications within the last five years, demonstrating the competence to carry out the project.

16. **Capacity building activities** (optional section) (maximum 1000 words). Please refer to the Call Text for the specific modalities of this section:

- a. Description of capacity building activities and relevance to the objectives of the proposal;
- b. Description of the candidate: CV, background (scientific, medical, etc.); scientific production; current work; and coherence of the training with the CV;
- c. Description of the host team (expertise in the field and qualification in research of the responsible person);
- d. Justification of the additional separate budget needed for these specific activities.

17. **Clinical trial description** (if applicable).

18. **Global financial plan** (sum of all years; all partners). **Please note that eligibility of costs is subject to national rules and regulations: refer to the Annex 4 of the Call Text.**

19. **Individual financial plan for each research partner**, sum of year 1-3. This table should include the costs of the clinical trial, if applicable

Please note that eligibility of costs is subject to national rules and regulations: refer to Annex 4 of the Call Text.

20. Signed declaration by the project coordinator and by all the principal investigators, partners in the project, concerning the agreement of their respective team members to participate in the proposal.

All the scanned signature pages should be assembled in the single PDF file of the application form, as the electronic submission system does not allow the uploading of more than one PDF file.

6. REBUTTAL STAGE

At this stage, each coordinator, upon access to the anonymous evaluation reports through the electronic submission system, will have the opportunity to comment the evaluations, to reply to reviewer's questions and to clarify factual errors or misunderstandings. However, issues which are not related with reviewers' comments or questions cannot be addressed and the work plan cannot be modified. The rebuttal letter cannot exceed 2.000 words.

7. IMPORTANT REMINDER FOR ALL APPLICANTS

Applicants should refer to the national eligibility criteria and requirements (refer to Annex 4 of the Call Text) and should contact their respective national/regional funding organisation contact persons prior to submitting the application. An **eligibility check** is mandatory for some national/regional funding organizations before the submission deadline (MoH, Italy).

The JCS will assess proposals to ensure that they meet the call's formal criteria [e.g. date of submission; number of participating research groups, type of project partners (academic, clinical/public health and industrial/SMEs), and inclusion of all necessary information in English, document length]. In parallel, the JCS will forward the proposals to the relevant TRANSCAN national/regional funding organisations that will perform a formal check of compliance with their respective eligibility criteria. Proposals passing both checks will be forwarded to independent international scientific experts for evaluation.

Please note that once the JTC 2016 is closed it is not possible to amend an application or to add further documents.

8. CONSORTIUM AGREEMENT AND START OF THE PROJECT

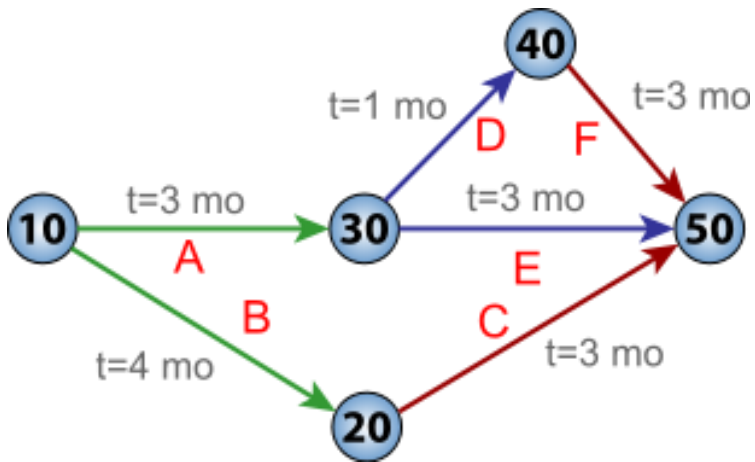
In order to ensure a proper conduct of the project activities, a Consortium agreement (CA) must be signed among the partners before the official start date of the project or not later than six month after the project start date. The CA should address the following issues: governance structure and decision making process, responsibilities between the partners and subsequent liability, reporting, ownership and use of research results, background and foreground IPR, publications, data sharing, storage coordination, and confidentiality. A copy of the CA will be made available to the concerned TRANSCAN-2 JTC 2016 funding organizations. For more details, see the TRANSCAN-2 JTC 2016 call text. The DESCAs template ([LINK](#)) can be used as a reference, however it must be adapted to the project and to each partner peculiarity. For the composition of the CA, the research partners are strongly recommended to see legal assistance of a TTO at their own institute.

Everything will have to be done for starting the funded project the 1st of April 2018. .The official start date shall be communicated in the annual reports and shall appear in the consortium agreement. If you are conducting a clinical trial, please keep in mind to register the trial at clinicaltrials.gov before the official start date of the project.

ANNEX 1. Gantt chart example

Gantt Chart		2017				2018				2019			
Month		3	6	9	12	15	18	21	24	27	30	33	36
Work Package 1 - Title	WP Leader												
Task 1.1													
Task 1.2													
Task 1.3													
Work Package 2 - Title	WP Leader												
Task 2.1													
Task 2.2													
Task 2.3													

ANNEX 2. PERT diagram example



PERT network chart for a seven-month project with five milestones (10 through 50) and six activities (A through F), further details see the [Wikipedia page](#)