

Ventilation strategies for infection control

Public-Private cooperation

8th September 2020

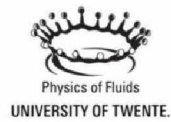
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- Short introductions (per person)
- Short description of the programme
- Ongoing and future actions:
 - Funding
 - The research proposal
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Round of short introductions



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 - To what extent ventilation can help?
- This leads to heated debates

Project Goal

- In view of our health and economy we aim to develop effective guidelines on ventilation strategies for infection control
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- These guidelines should address how the concentration of a virus in the air can be limited in the **most efficient and sustainable** way for **specific spaces** where a certain amount of people are performing a certain activity
- These guidelines are applicable for the current COVID19 pandemic, but also for other viruses (e.g. common cold, influenza, new future viruses) so as to reduce their economic and societal impact

The approach

- The ideal approach in “normal times” would be:
 - Achieve a complete scientific basis starting from the fundamentals
 - Make and implement guidelines

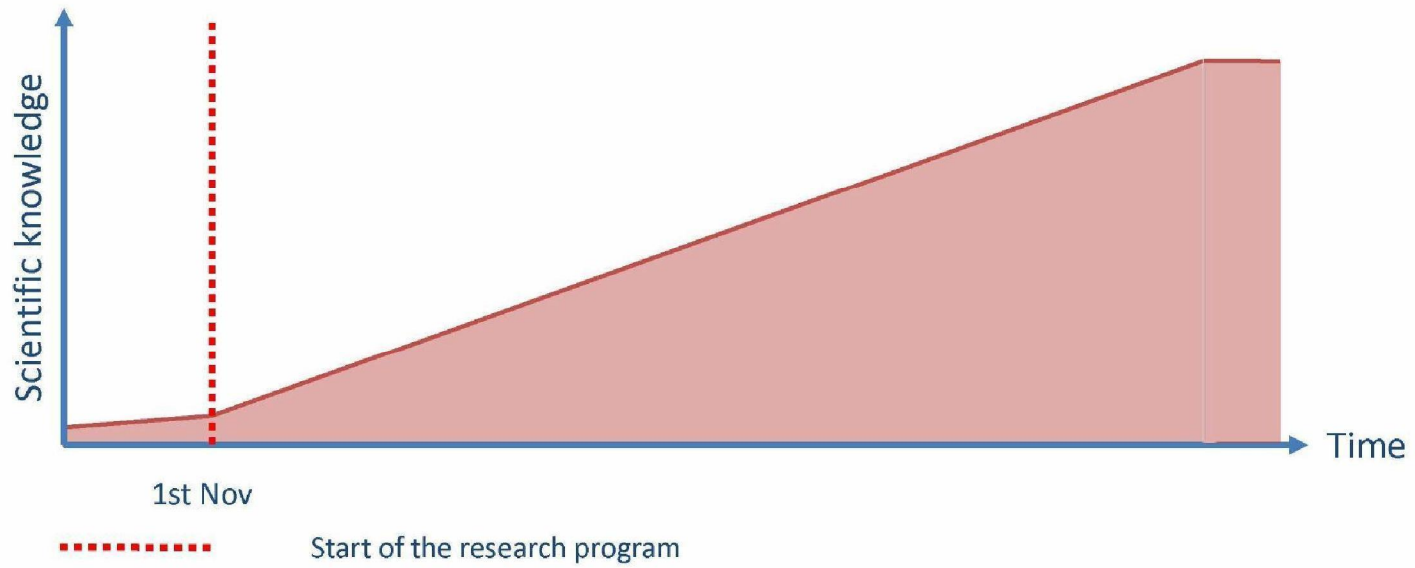
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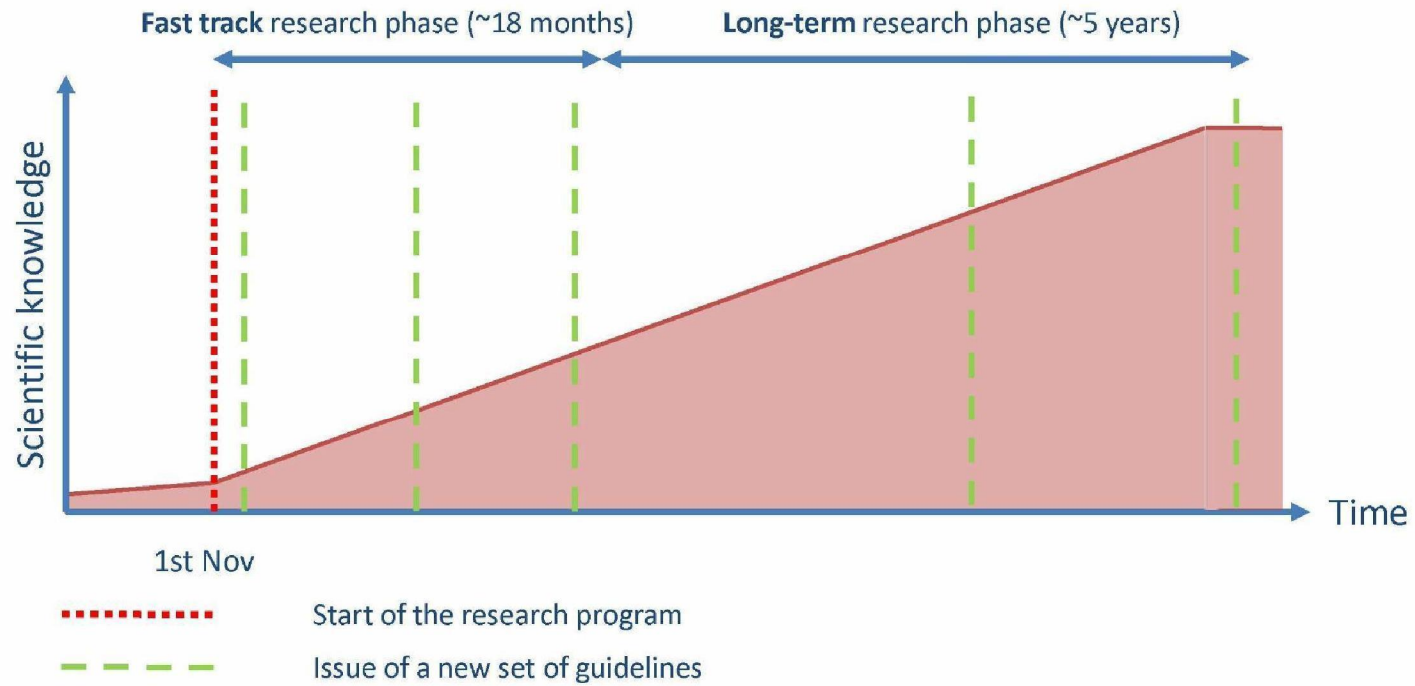
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- However, we do not have the luxury of **time**: we need to address the societal needs as quickly as possible, while maintaining a high level scientific basis
- Thus, we propose a phased approach where first, a “**Fast Track**” phase will generate knowledge and guidelines on an accelerated manner. This will be followed by a **long-term** research track where a more comprehensive and fundamental approach will take place.

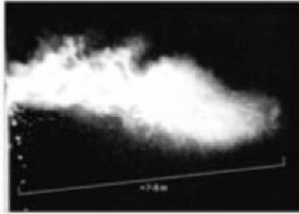
Project timeline



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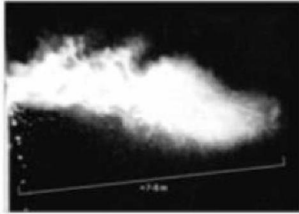


Project Structure (open for extension)



P1: Infectivity of viruses in
aerosols
UMCG (lead), UvA, RIVM

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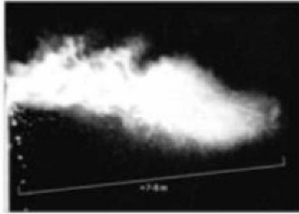


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P2: Spreading of Aerosols
UT (lead), UvA, TU/e

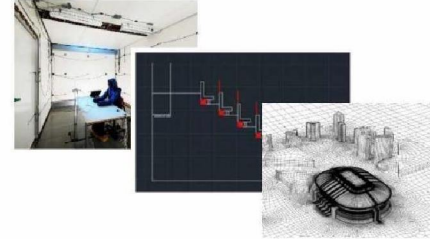
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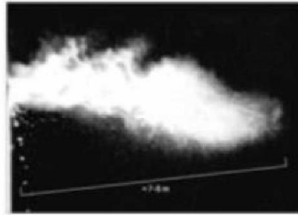


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P3: Ventilation concepts for the removal of aerosols
TU/e (lead), TUDelft

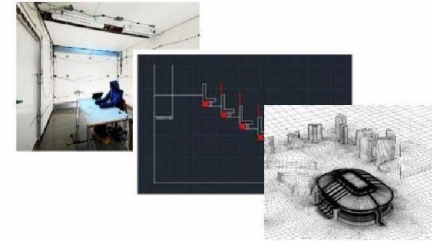
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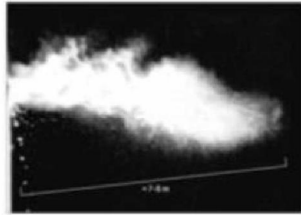


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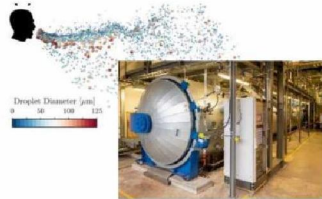


P4: Real world use cases
MARIN (lead), ALL partners invited

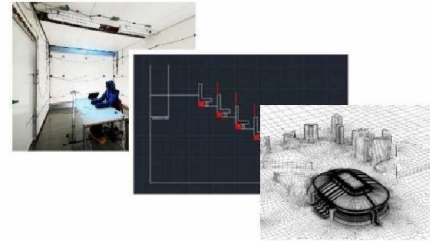
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P5: Strategies for Infection control
TUDelft (lead?), ALL partners invited

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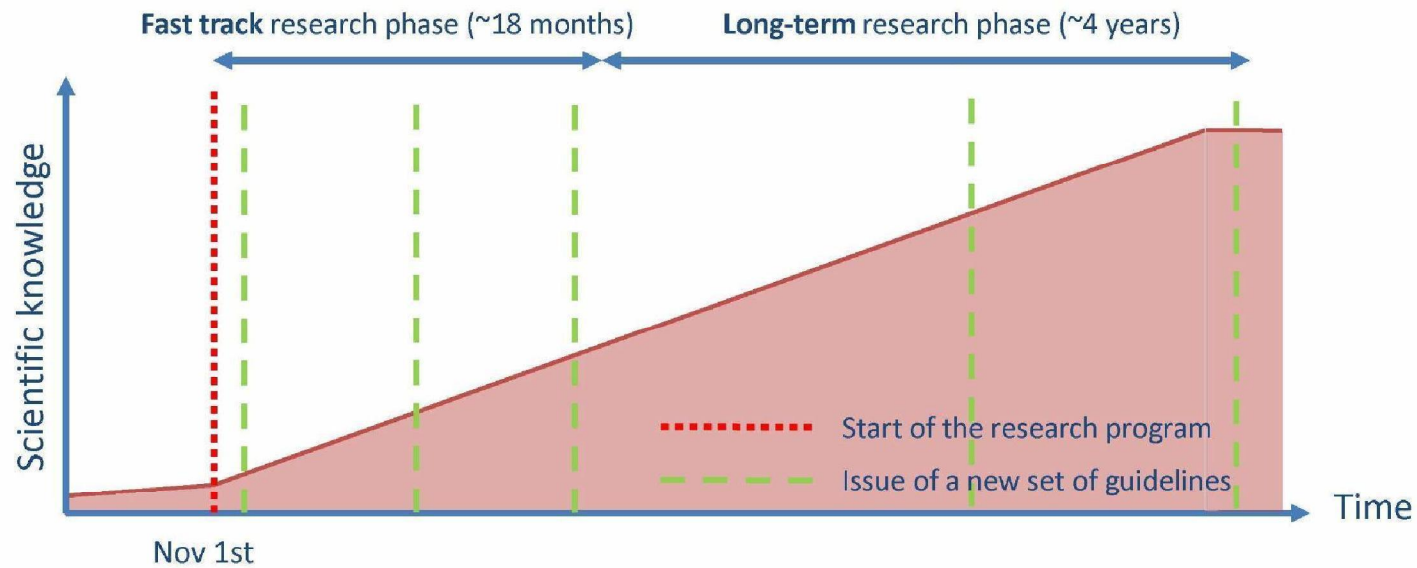
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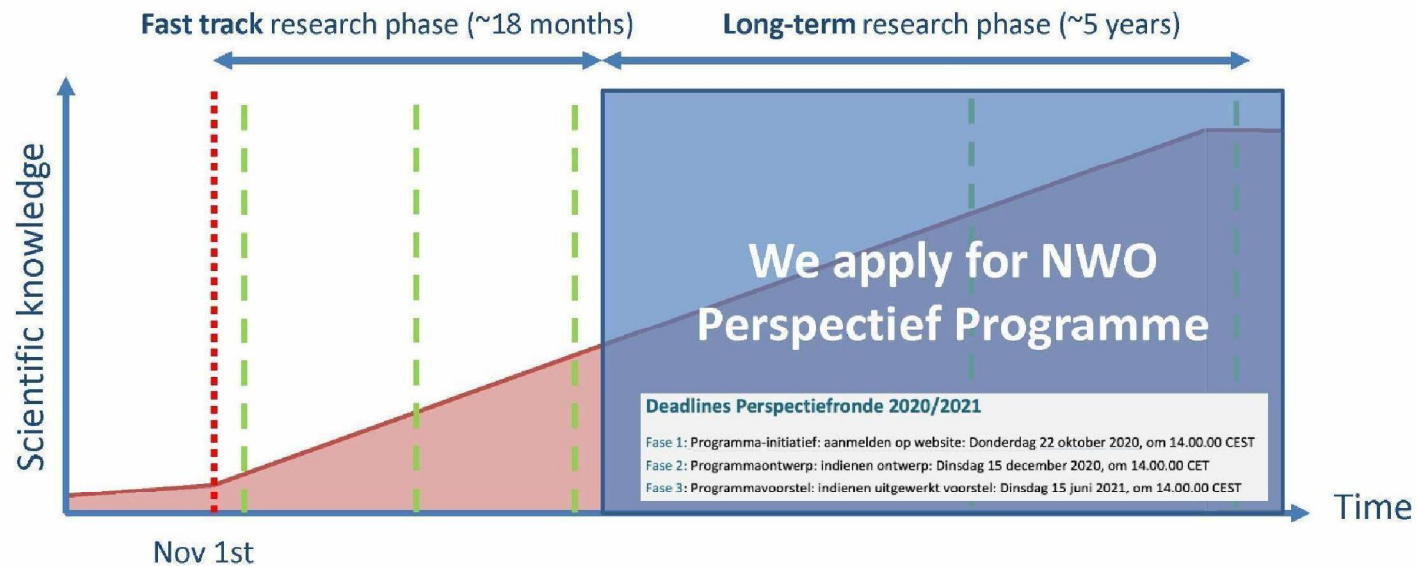
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- Time line: starts in November 1st 2020
- Total budget: 15 – 20 MEuro



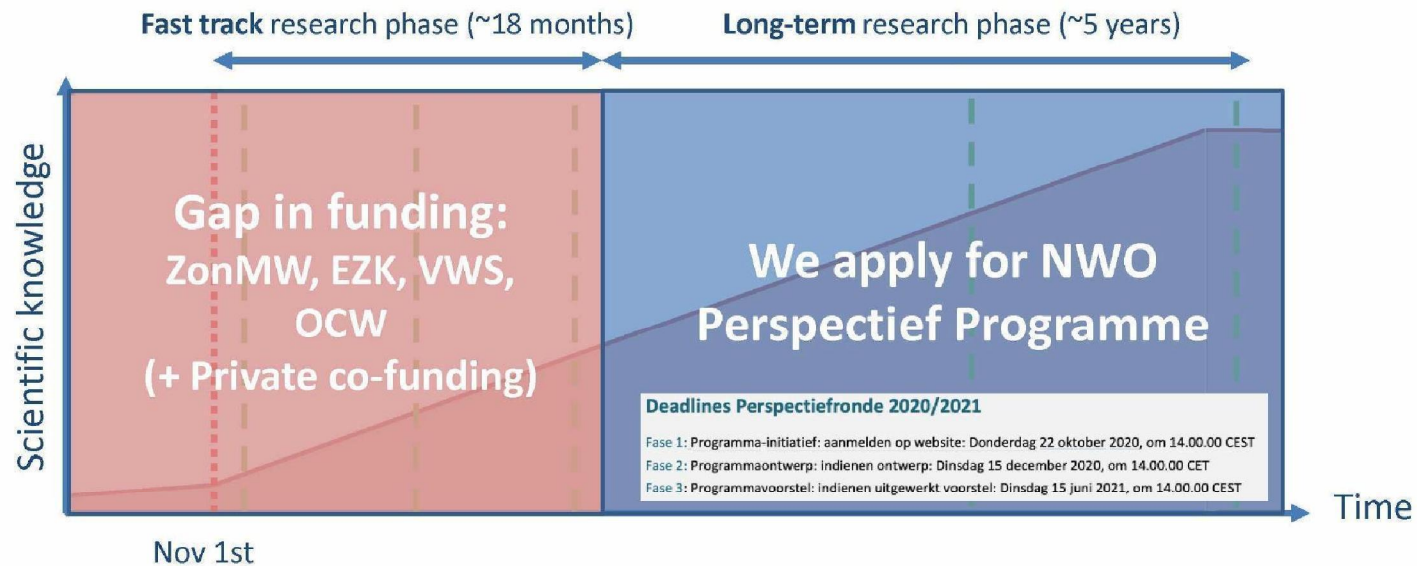
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- MARIN compiles, and produces the final document (to be reviewed by all of you)

We propose the following timeline



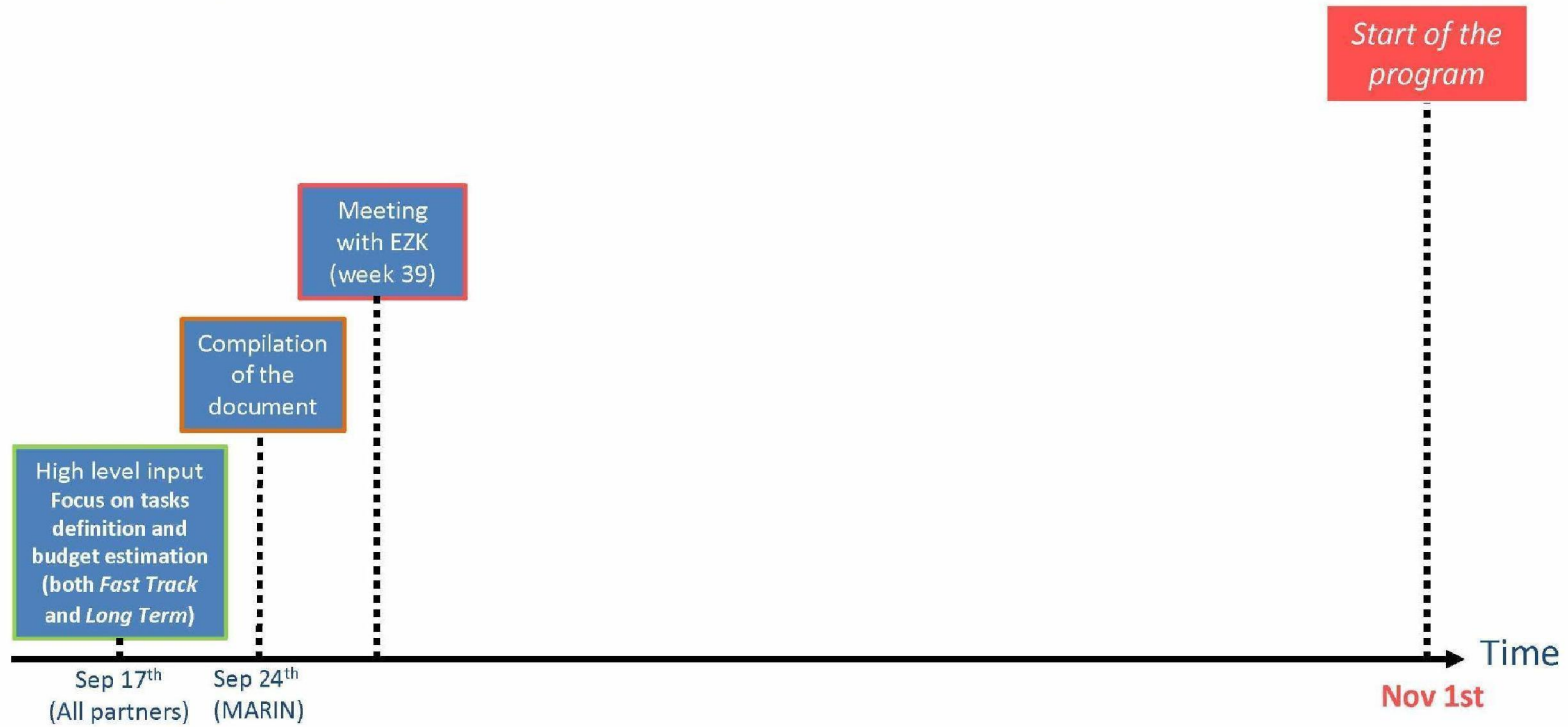
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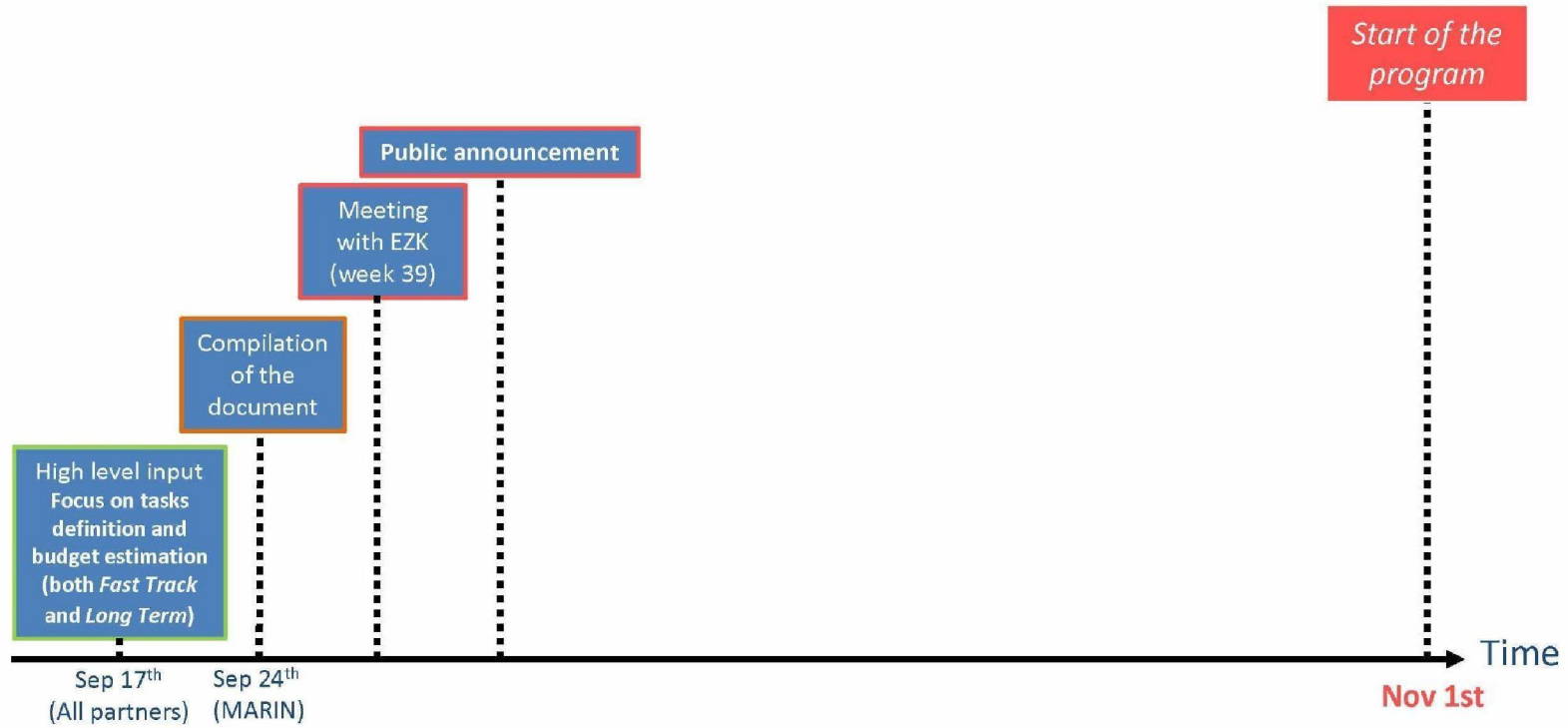
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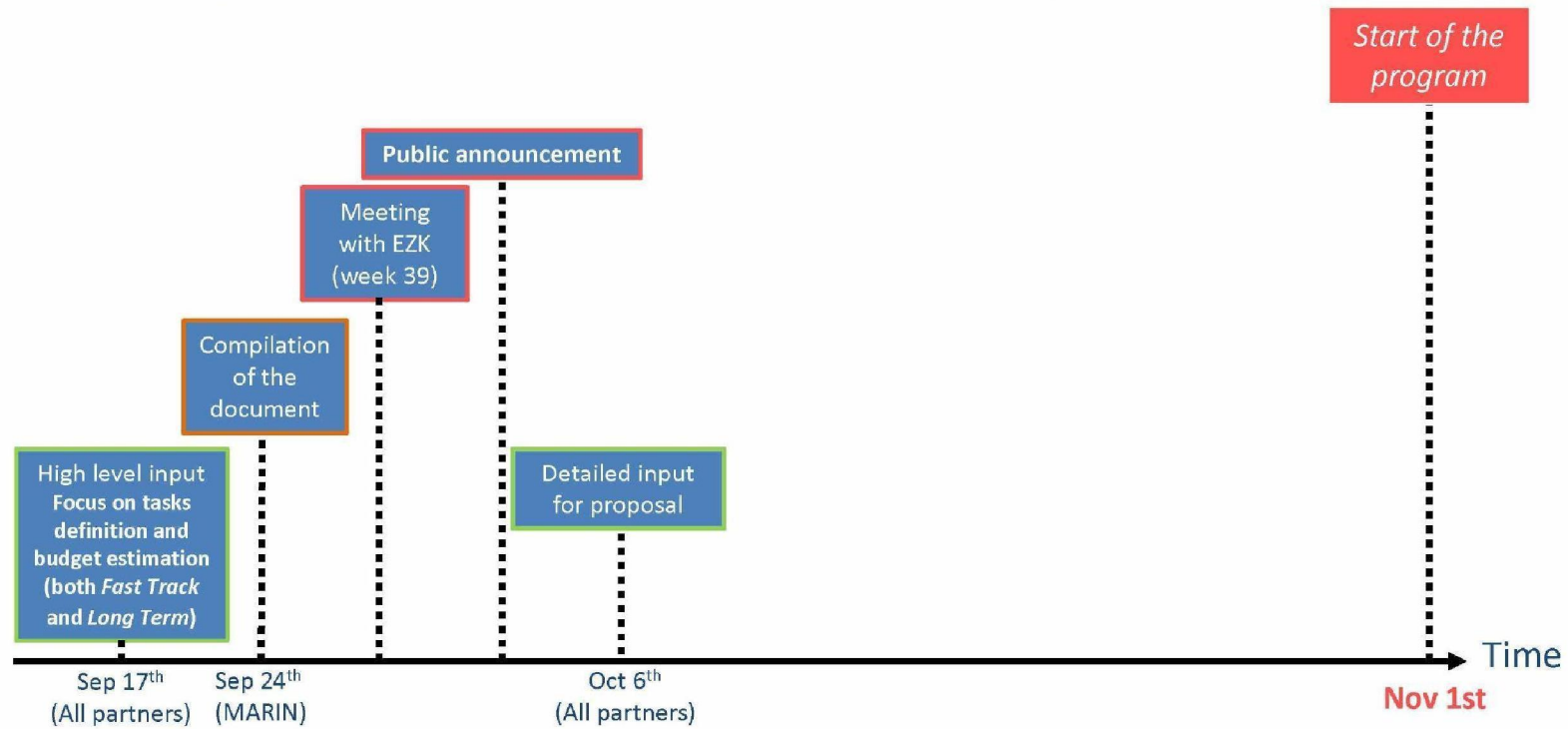
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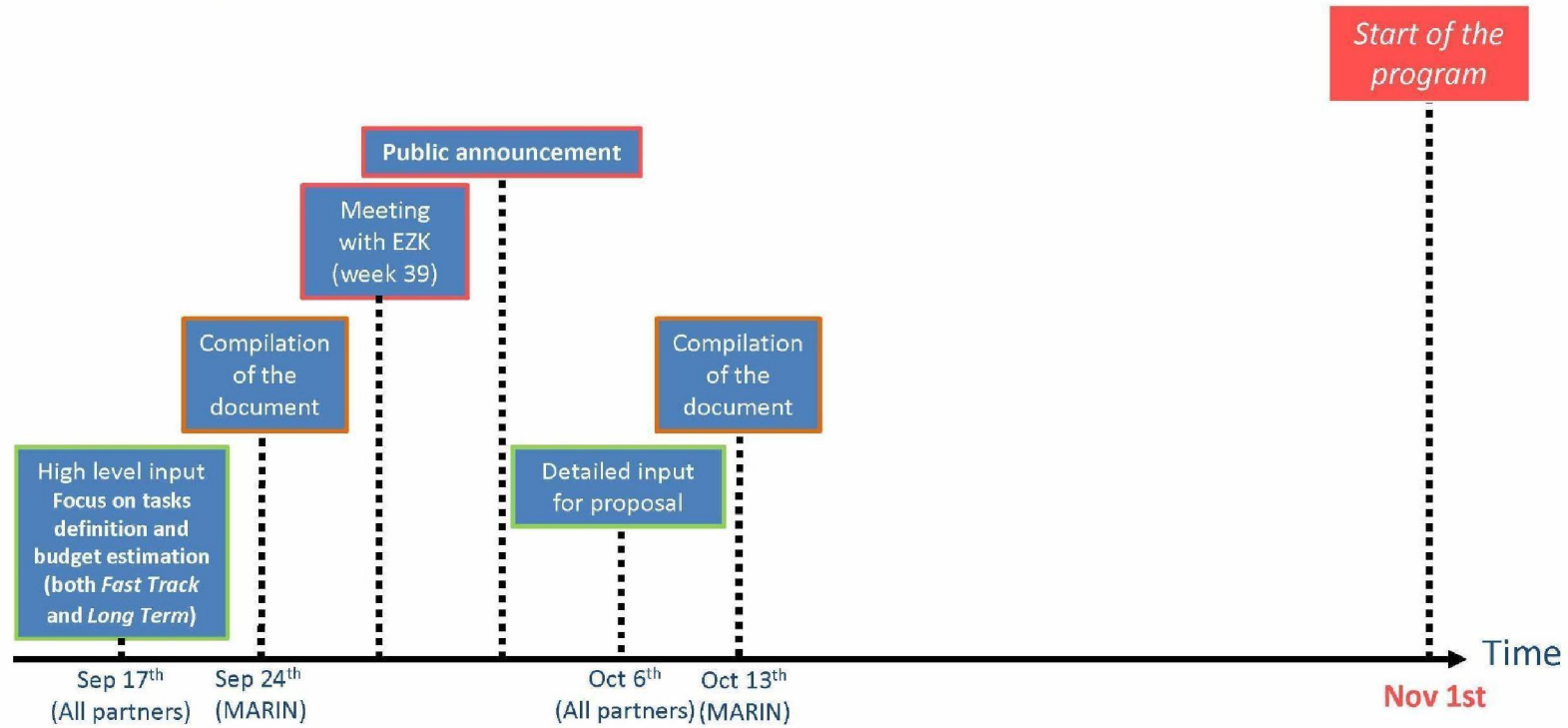
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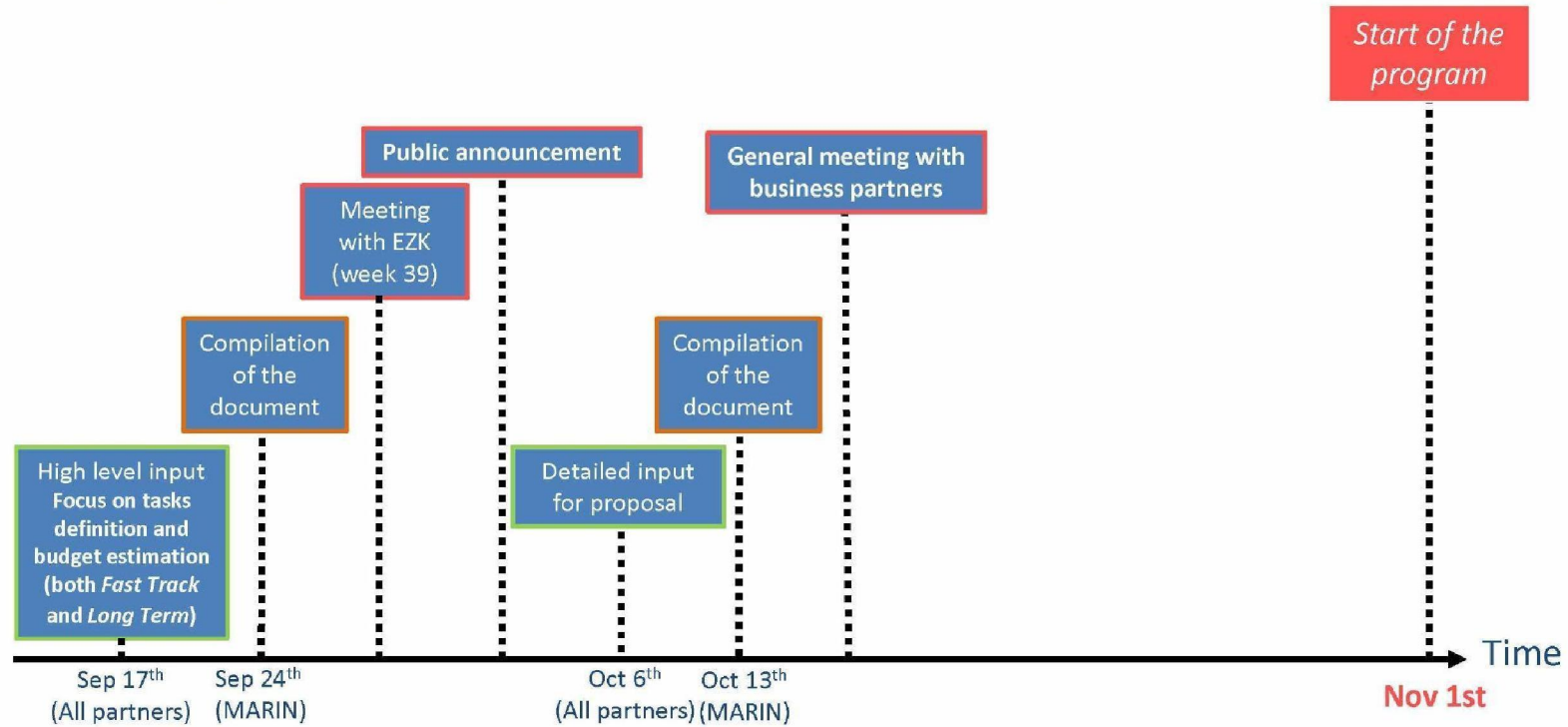
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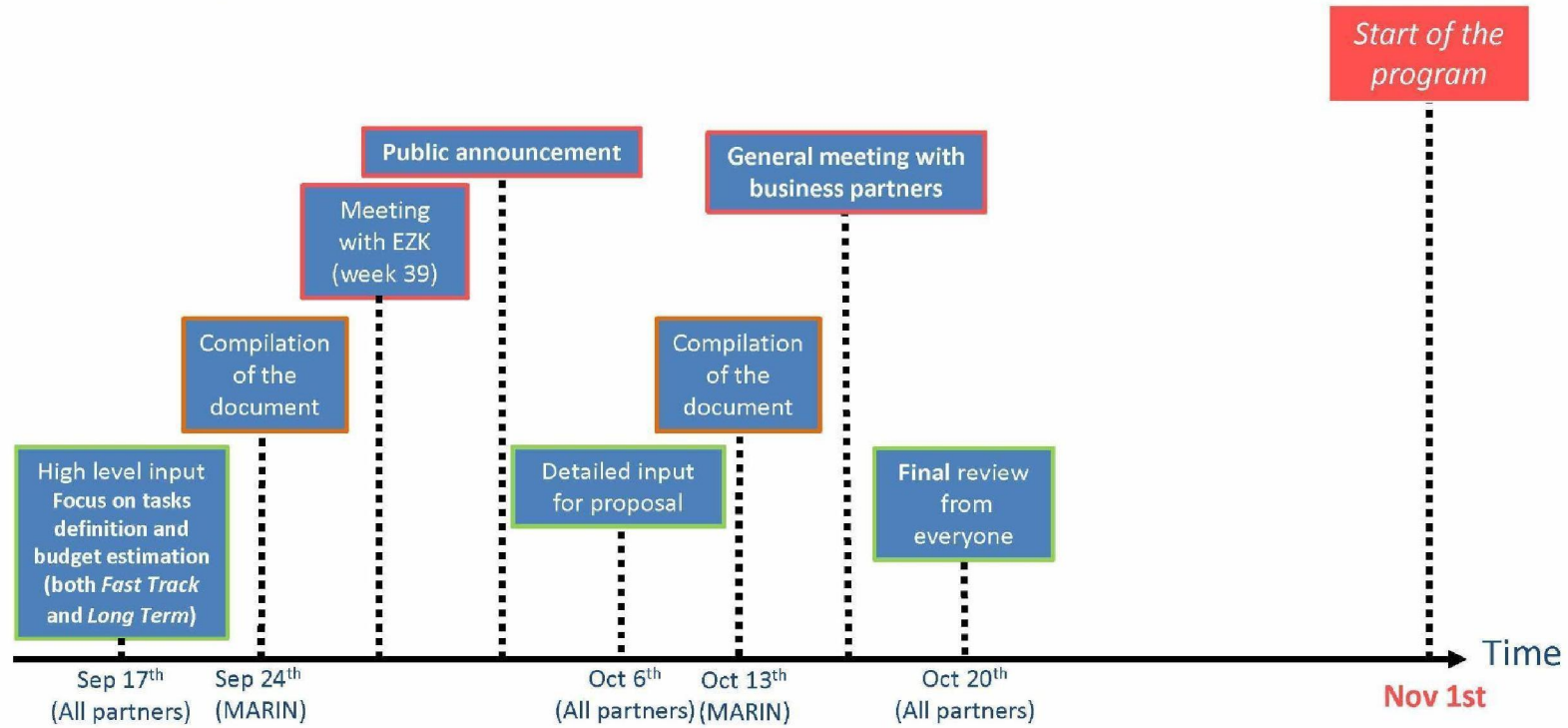
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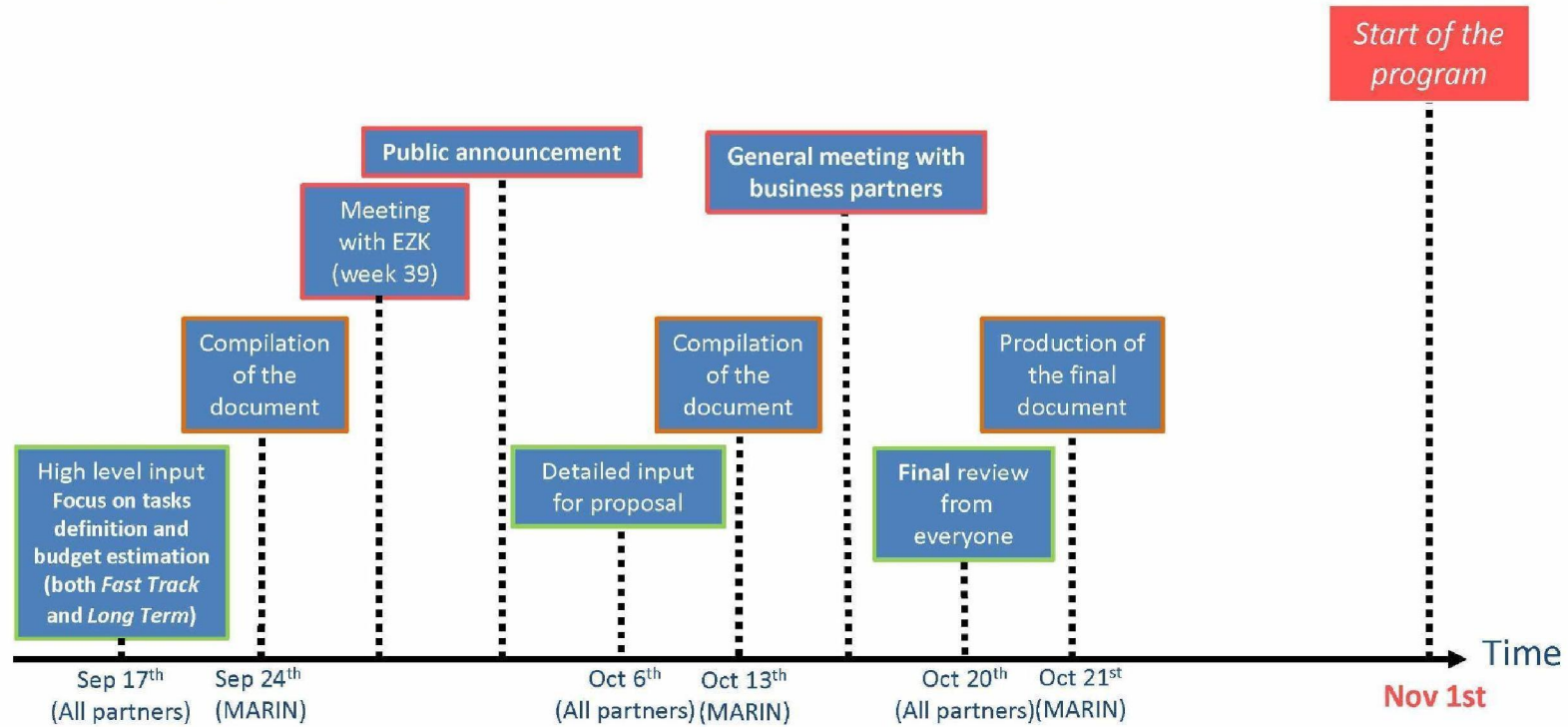
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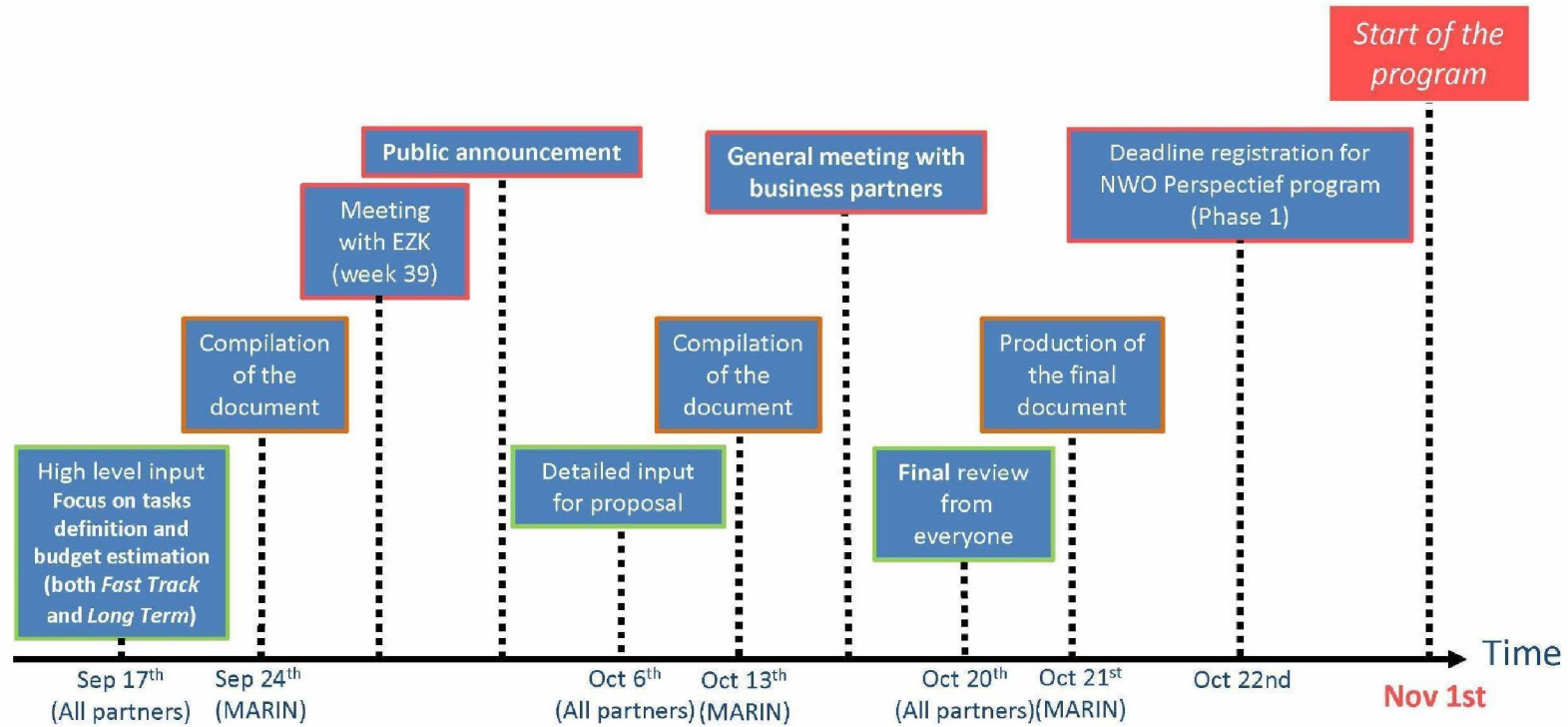
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- Use cases will be carried out with research partners, technology providers and end-users

Use cases (partners we have been in contact with)

Research team

TU/e EINDHOVEN
UNIVERSITY OF
TECHNOLOGY

TUDelft






UNIVERSITY OF AMSTERDAM

MARIN

All research partners are invited
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Technology providers



Construction, engineering, HVAC

 **heijmans**  **bam**

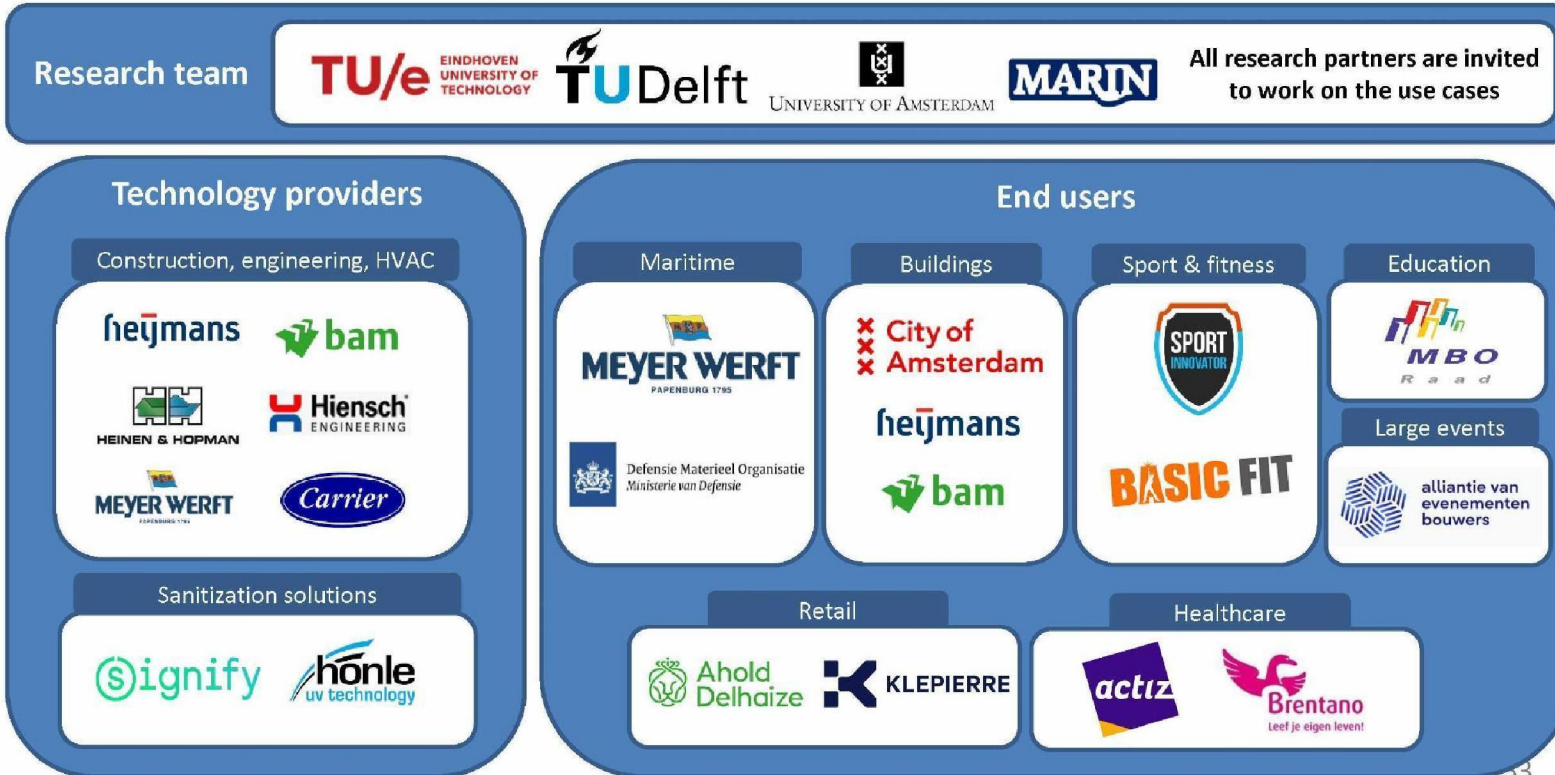
 **HEINEN & HOPMAN**  **Hiensch** ENGINEERING

 **MEYER WERFT**  **Carrier**

Sanitization solutions

 **Signify**  **hönle** uv technology

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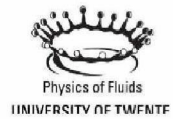
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Getting to know each other (one person per research group)

- Comments/remarks on the content?
- Comment on your role within the programme
- What is your vision of success for this programme?



5.1.2e



5.1.2e



5.1.2e



5.1.2e



UNIVERSITY OF AMSTERDAM

5.1.2e



umcg

5.1.2e
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RIVM

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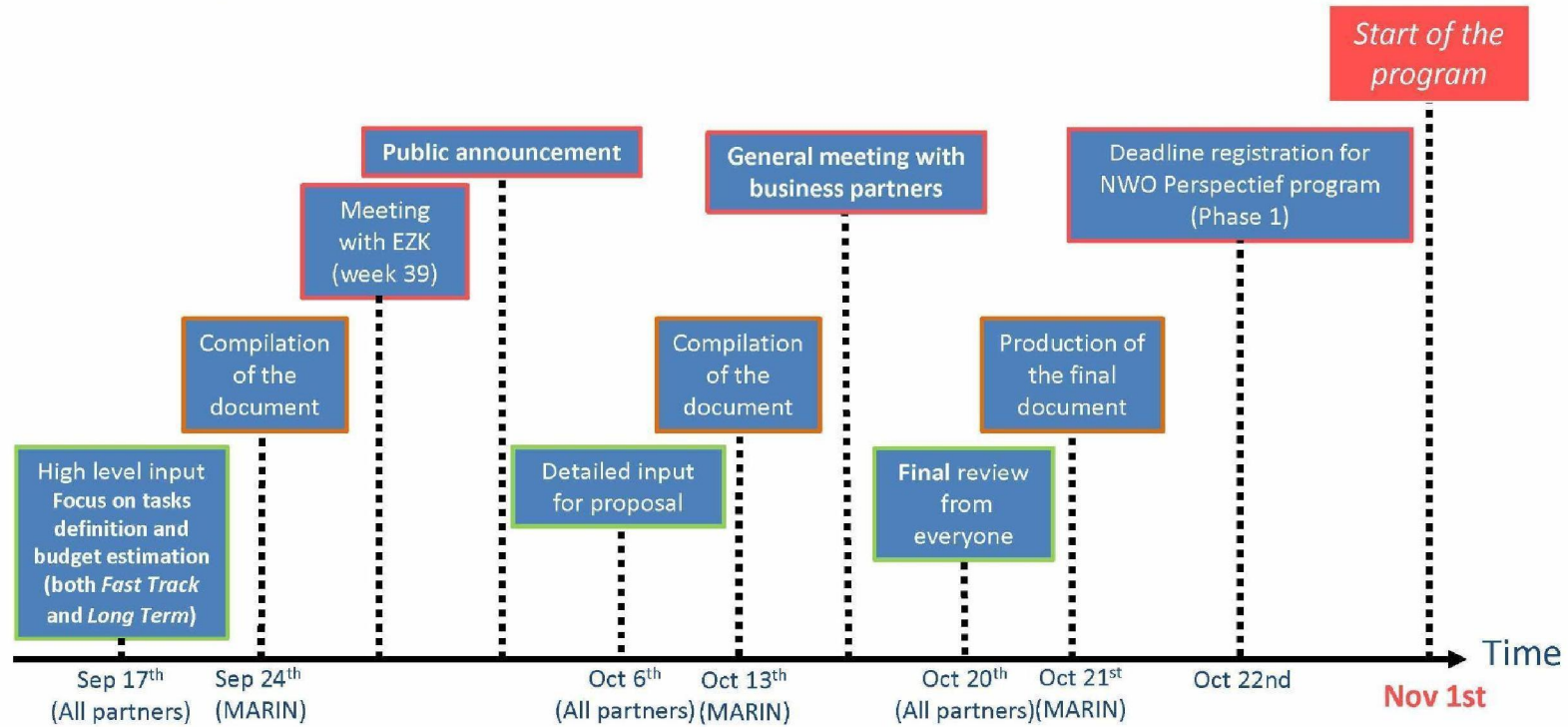
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