Bron: LMS jaarverslag

MISSION CRITICAL MOBILE BROADBAND

NETHERLANDS

26 JANUARY 2021

MOBILE COMMUNICATION IN THE NETHERLANDS

Mission critical infrastructure

C2000

- Nationwide
- 10 multi control rooms
  - Intake and dispatch
- Voice + data, mainly status (TETRA)
- 80.000 PPDR users
- Renewal 2020
- Fall back PTT app (tender procedure)
- GO-GO

Other infrastructures

National MNO (3x)

- Police nationwide contract
  - Priority
  - capacity
- 25 Safety regions: combined contract
  - priority
- Ambulance mixed solutions
- Defence (military police)
  - Nationwide contract

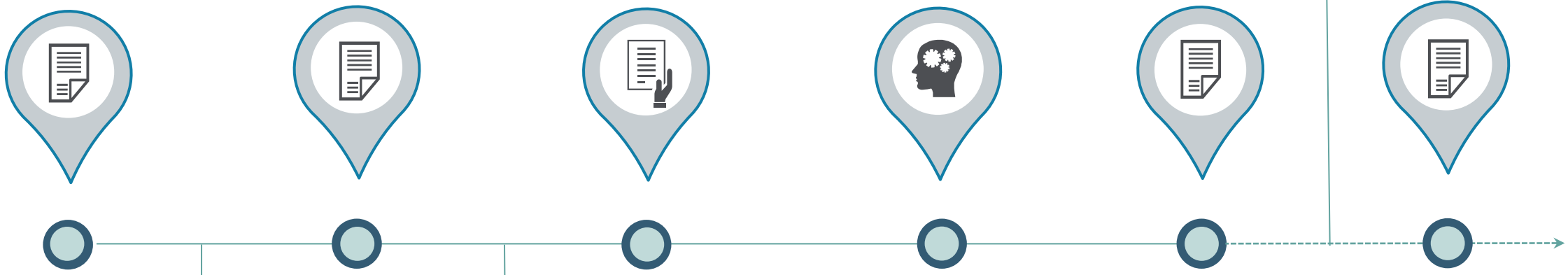
Usage

Applications

- Police
  - Situational awareness
  - Register look up
  - body worn camera
  - Scanning (face, fingerprint)
  - voice
- Fire
  - Geo information
  - Situational awareness
- Ambulance
  - Medical information
  - Realtime monitoring and vide
- Common:
  - Route information
  - Mobile office

SHORT HISTORY

Program Definition phase:



APRIL 2019
Briefing parliament about renewal C2000 (TETRA) regarding ownership supplier

NOVEMBER 2019
Briefing parliament about possibilities nextgen mobile broadband for PPDR

MEI 2020
Delivery of feasiblity study

SEPTEMBER 2020
Multi CIO's and management board informed

OKTOBER 2020
Briefing parliament about feasiblity study and next steps

NOVEMBER 2020- MAY 2021
- Public Businesscase
- Market exploration MNO
- Setup program outline
- High level technical description

Preliminary research part 1
contact with suppliers and international partners

Preliminary research part 2
Conduct feasiblity study by Dutch companies Strict/VKA

replace current system within app. 5 years

https://www.tweedekamer.nl/kamerstukken/brieven_regering/detail?id=2020Z17312&did=2020D37449

SETUP OF FEASIBILITY STUDIE

Main question: Can the Dutch Government realise mission critical communications in a responsible manner based upon a mobile broadband infrastructure?

3 Scenario's

0 Current C2000-network (reference)

1 Complete government owned and operated

2 Fully outsourced: Government will buy the solution as a service from a MNO

3 Partially outsourced: the core network is goverment owned and operated, the radionetwork is bought as a service

Comparison based on 13 criteria:
Amount of strategic and/or politcal control, technology, security, organisation, international developments, future-proofness, finance, etc.

Conclusions + recommendations

CONCLUSIONS

1

Own solution

- Large investments and operational costs
- Long time to realise
- 2x3 and 2x5MHz allocation National frequency plan is insufficient to support al services.
- Government currently has no 4G/5G operator for such a network.

2

Fully outsourced

- Pro :
  - less technical knowledge needed
  - Use of networks from one or more MNO's (redundancy, capacity, high availablity).
- Con:
  - Security will depend on choices of MNO
  - Specific services will need negotiations and will be complex.

3

Partially outsourced

- Pro
- More control and independcy because goverment owns core network .
- Cost of core-netwerk relatively low.

- Con
- More technical knowledge needed
- Interface with MNO's.

NOT ACHIEVABLE

ACHIEVABLE

RECOMMENDATIONS

01 Determine starting points for the network including the required network capabilities

02 Investigate the possibilities and wishes of joining (local) authorities to apply demand bundling

03 Start a high level definition study based on the security requirements

04 Put up testing grounds with suppliers and local authorities

05 Organize a market consultation with the Dutch operators

06 In the short term set up security requirements for mission critical communications

07 Determine the exact operation of the Order in Council in consultation with legislative lawyers

08 perform a detailed risk analysis

09 Set up a business case that provides insight into investments and operational costs and benefits

10 Research the modes of financing in other countries

11 Take an active part in international developments

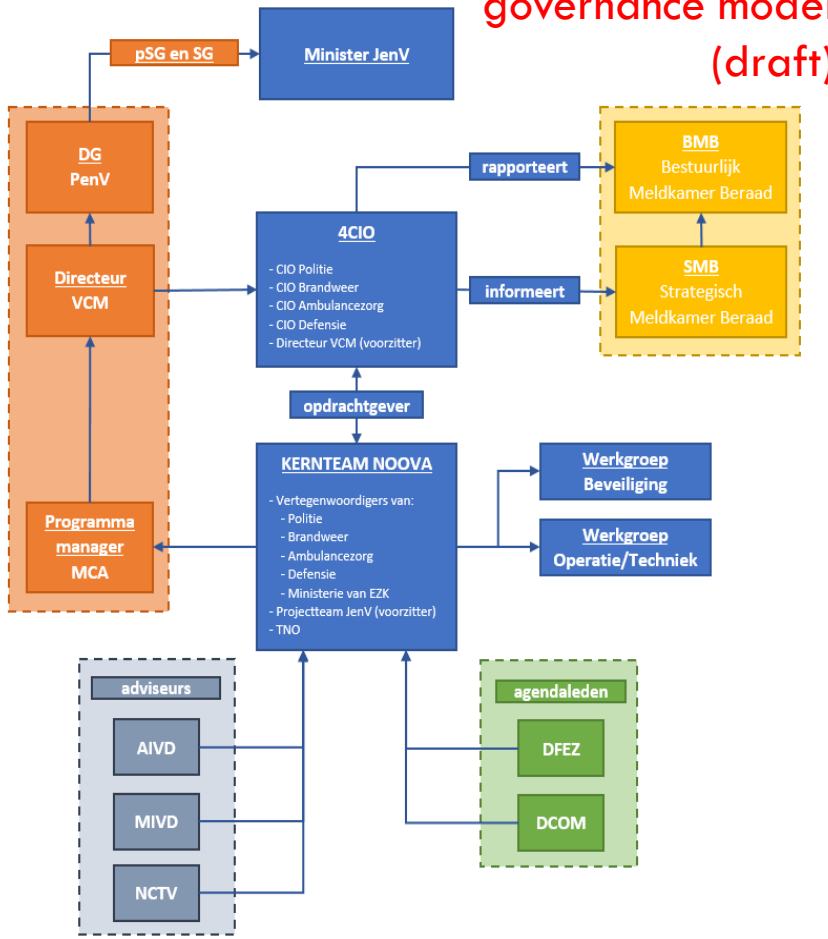
12 Start the preparation of the procurement process

13 Start gaining access to the required knowledge

NEXT STEPS- PROJECT DEFINITION

- Setup multi disciplinary project team (working title NOOVA)
  - Preparation tender procedure
  - Involve users
  - Start field trials
  - Al regular tasks (project phasing, deliverables, finance, planning, risk mangement,….)
  - Report to multi CIO (governance)
- Setup public businesscase with external party
  - Follow general guideline from the Ministry of Finance
  - Elaborate conclusions feasablity study
  - Perform market exploration
  - Write high level solution architecture
- Have the plan and businesscase assesed by the BIT

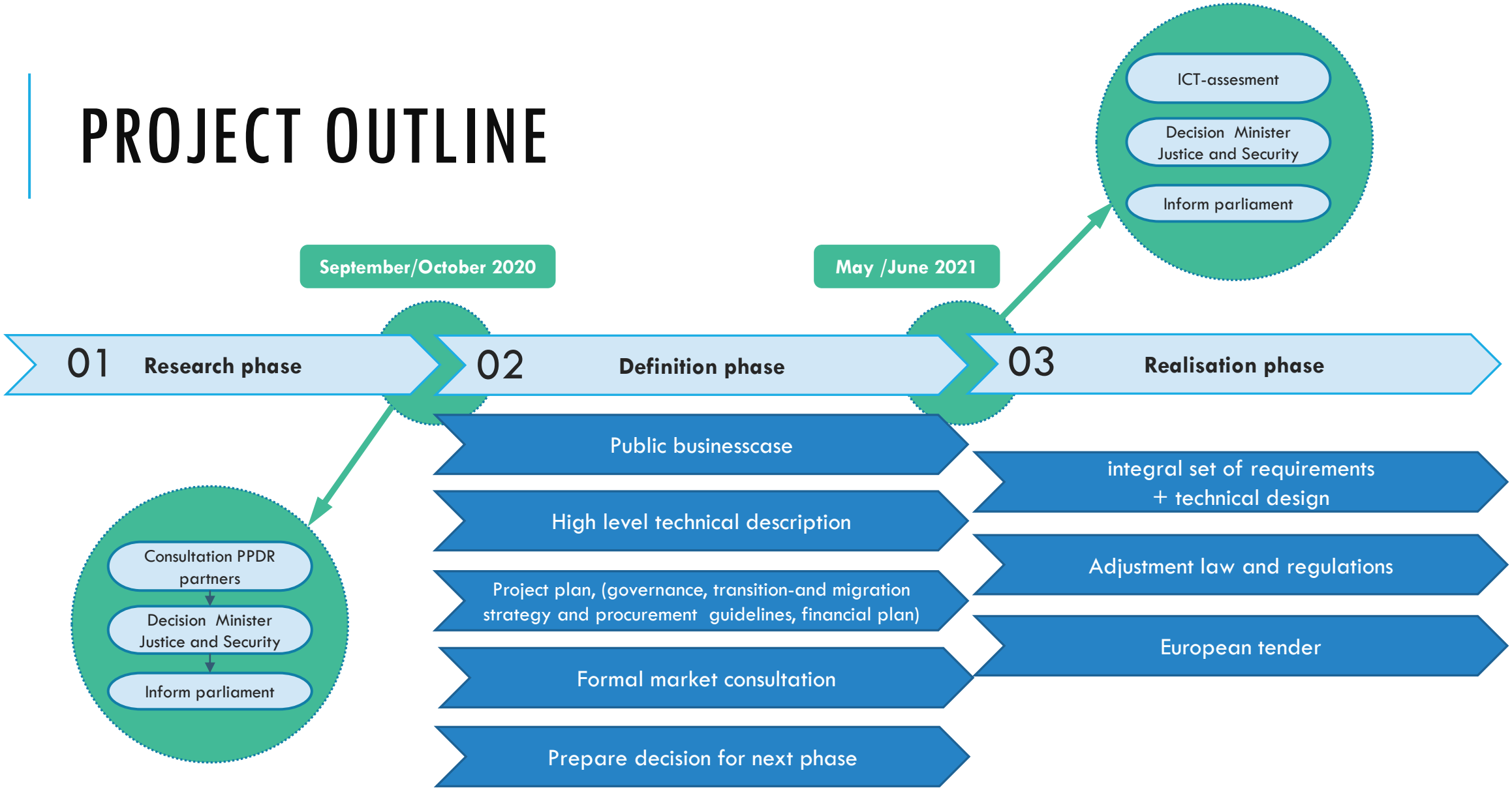
governance model (draft)



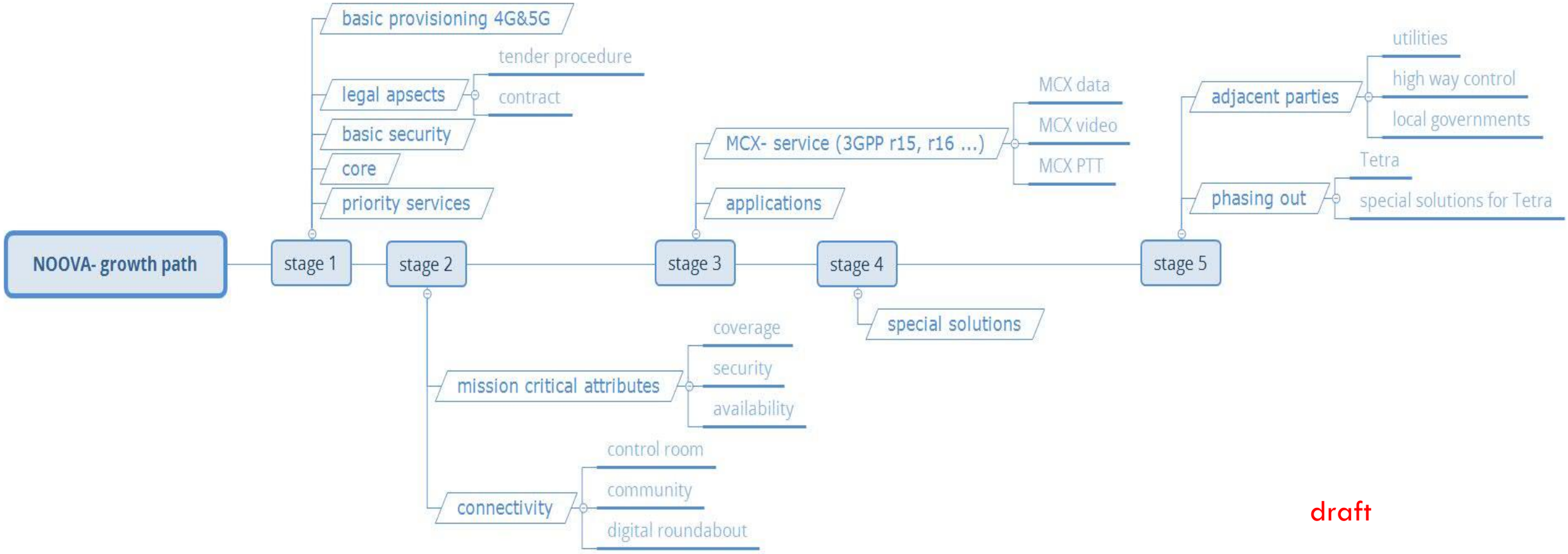
BIT

The ICT Assessment Office (BIT) has been set up to prevent problems arising with government ICT projects. The BIT assesses major central government ICT projects according to technical and practical feasibility and likelihood of success. If any one part of a project is worth €5 million or more, the BIT will assess the entire project.

PROJECT OUTLINE



GROWTH PATH NOOVA



draft

IN PARALLEL

Activities to support general direction for mission critical commmunications

- Broadway
- 3GPP, SA6
- TCCA international working groups
- Field trials with users and industry
- Gain knowledge
- Coordination and exchange of information with other large IT projects within Dutch PPDR (control rooms, situational awareness, Defence etc.