

# eDelivery

## POC in Danish Health Care

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# What is MedCom?

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MedCom is established in 1994 as a partnership of authorities, organisations and private enterprise associated with the Danish health sector with the following aims:

*“MedCom shall contribute to the development, testing, dissemination and quality assurance of electronic communication and information in the health sector with a view to supporting good practice in patient care.”*

MedCom is financed by:

The Ministry of Health

The Danish Regions

Local Government Denmark/Municipalities

- MedCom has 40 employees and works normally in 2 year long project periods with objectives defined by the Steering Committee and always with a focus on consensus amongst the participating parties.

✓ NONPROFIT  
✓ CROSS SECTOR  
✓ ALL IT-VENDORS  
✓ STANDARDS & INFRASTRUCTURE  
✓ NATIONWIDE  
✓ PRACTICAL IMPLEMENTATION  
✓ eCOMMUNICATION  
✓ TELEMEDICINE

# eDelivery

POC in Danish Health Care

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# POC Objectives

- Decision in MedCom Steering Committee 2017 to modernize the danish electronical healthcare communication in MedCom11 (2018-2019)
- Objectives
  - The technical cohesion ensures
    - Possibility to combine message communication with data sharing on request
    - Possibility of switching communication patterns from message communication to data sharing on request
    - Possibility of sharing data on request for portals and mobile devices
    - Possibility of smooth transition migration from message communication to data sharing on request

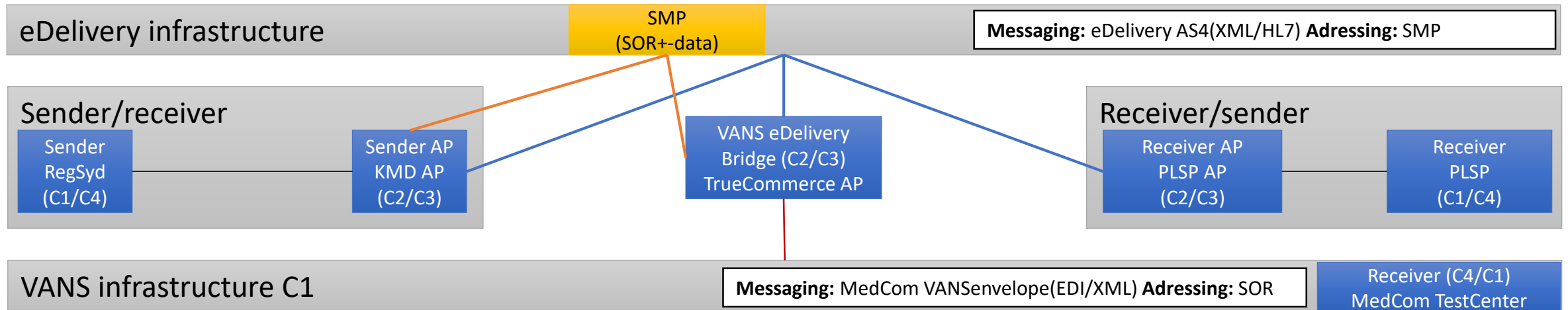
# The POC Timeline

- Spring 2018: Gathering of the stakeholders view on modernization
  - Meetings with input from stakeholders
  - Input from DIGST working group on eDelivery
  - Condensation of this into workable parts
- Late summer 2018: Developing the foundation for the POC
  - Choosing a collaborating vendor to build and form the POC
  - Agile development of the POC building blocks
- Early autumn 2018: Choosing and making contracts with stakeholders for the POC
  - Vendors and stakeholders in GP sector, regional and municipality sector
  - Use cases for implementation and live demonstration
- November 2018: Implementation in real life systems
- December 2018: Presentation of eDelivery and live showcase of eDelivery 4- & 3-corner model

# eDelivery 4-corner model network

- Simple Capability look-up in SMP
- Sender
  - Regional EHR Application
  - Domibus AP
  - Human-aided integration between Application and AP
- Receiver1
  - General Practitioner System
  - Self-implemented AP (upgraded PEPPOL AP)
  - Fully integrated
- Receiver2
  - Municipality Homecare System
  - Domibus AP
  - Human-aided integration between Application and AP
- Message
  - Metadata in SBDH
  - Message Base64-encoded in SBDH
- Flow
  - MedCom Clinical messages from Sender to Receivers
  - MedCom Receipt messages from Receiver to Sender

POC – Modernisation of infrastructure – eDelivery messaging perspective – eDelivery 4 Corner Model

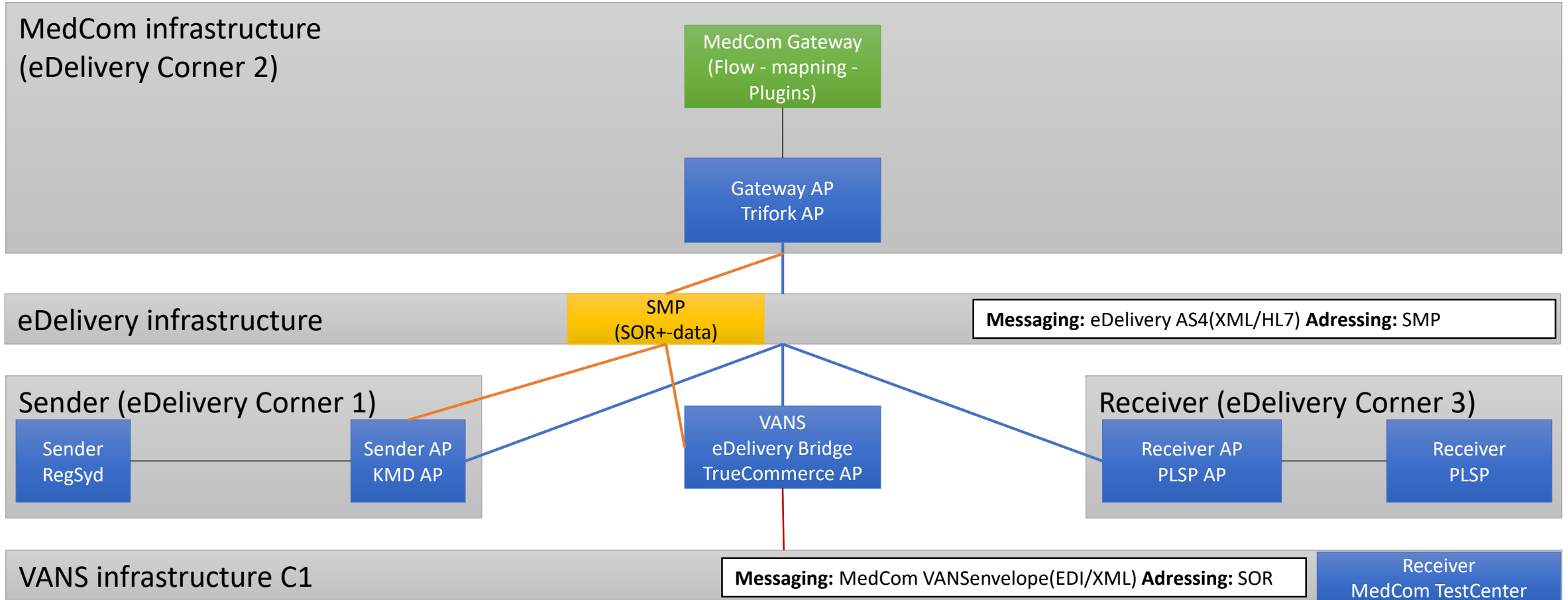


# eDelivery 3-corner model network

- All parameters as the 4-corner network
- In addition
  - Central Gateway
    - Integration engine
    - Domibus AP
    - Fully integrated message exchange between Integratio engine and AP
  - Special entries in SMP
    - for handling the "upcoming" of a message in the network from corner 1 to 2
    - For handling the "distribution" of a message from corner 2 to 3



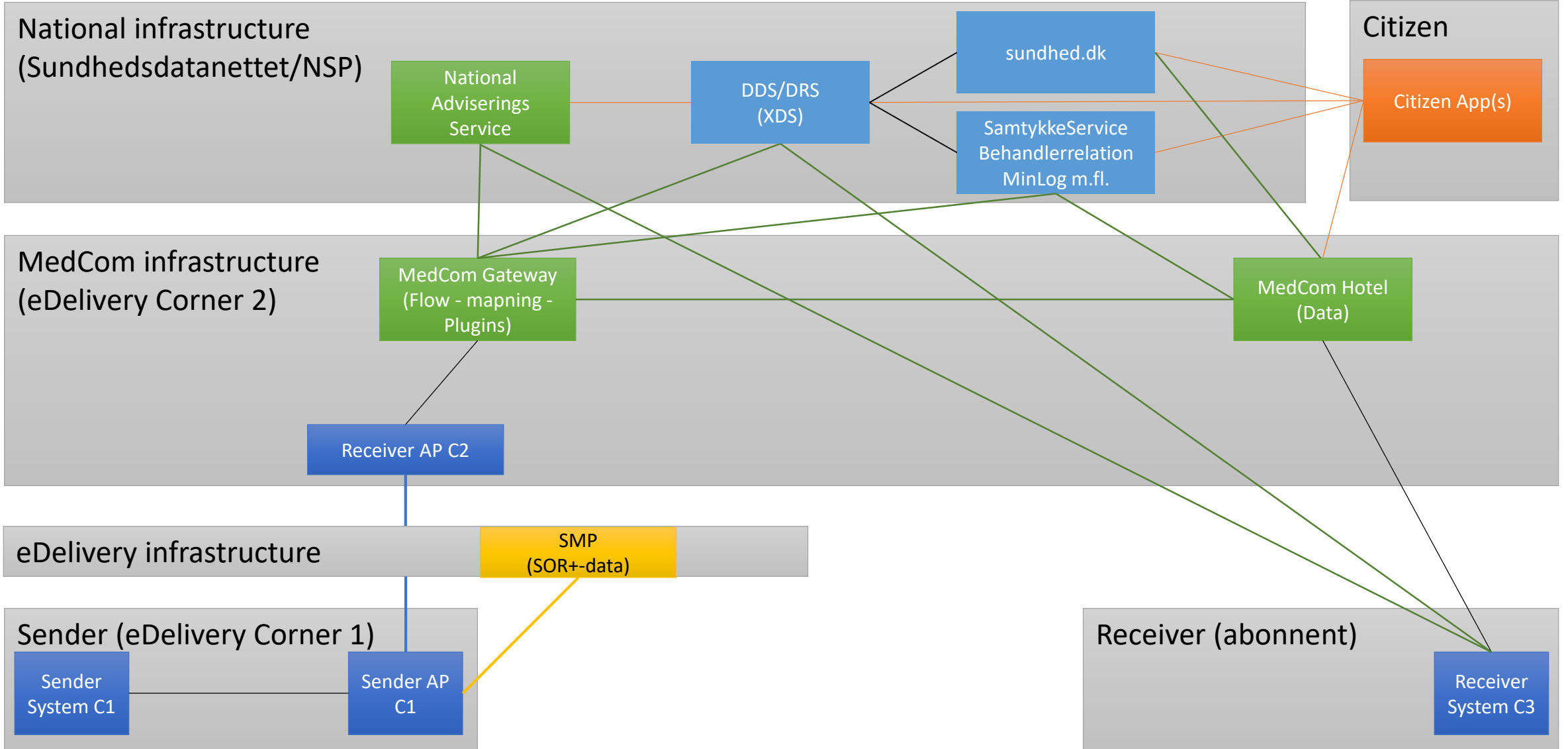
POC – Modernisation of infrastructure – eDelivery messaging perspective – eDelivery 3 Corner Model



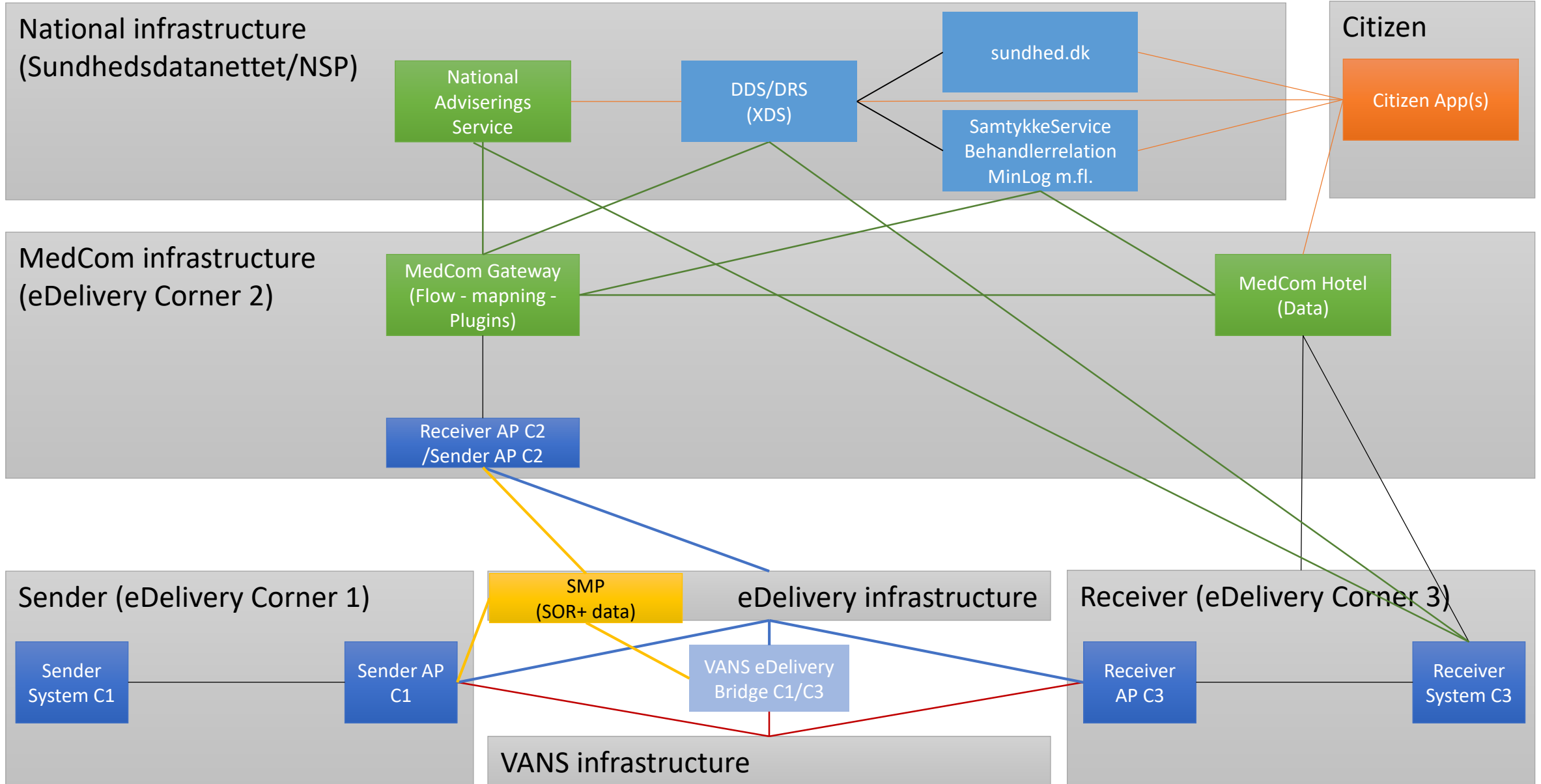
# eDelivery 3-corner model network (in addition for sharing data on request)

- Central Gateway
  - Integration engine with configurations for how each type and version of a message should be handled
    - All message handling based on metadata from SBDH
    - With transformation services for HL7 CDA and HL7 FHIR
    - Dispatching service for messages to IHE XDS repository (SOAP) and FHIR server (REST)
    - Dispatching service for notifications to National Notification Service (NAS)
- National Portal (sundhed.dk) able to request data from the XDS repository and FHIR server for a given patient.
- GP Portal able to request data from FHIR server based on notification from NAS

# POC – Modernisation of infrastructure – eDelivery Corner 3 Model + Delingsparadigme via FHIR MedCom Hotel



POC – Modernisation of infrastructure – eDelivery Corner 3 Model + Delingsparadigme via DDS og MedCom Hotel



# Final recommendations from MedCom steering committee

- Based on the POC and the evaluation, MedCom recommends
  - making messages available to the citizen himself and health professionals (data sharing)
    - With the creation of message repository for a copy of all relevant messages
    - By giving citizens access to messages on sundhed.dk and mobile platforms
    - By giving healthcare professionals access to messages
  - launching the transition to eDelivery-based messaging
    - In close cooperation with DIGST
    - And with an underlined statement on healthcare being the frontrunner for eDelivery implementation in Denmark.

Thank you

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