

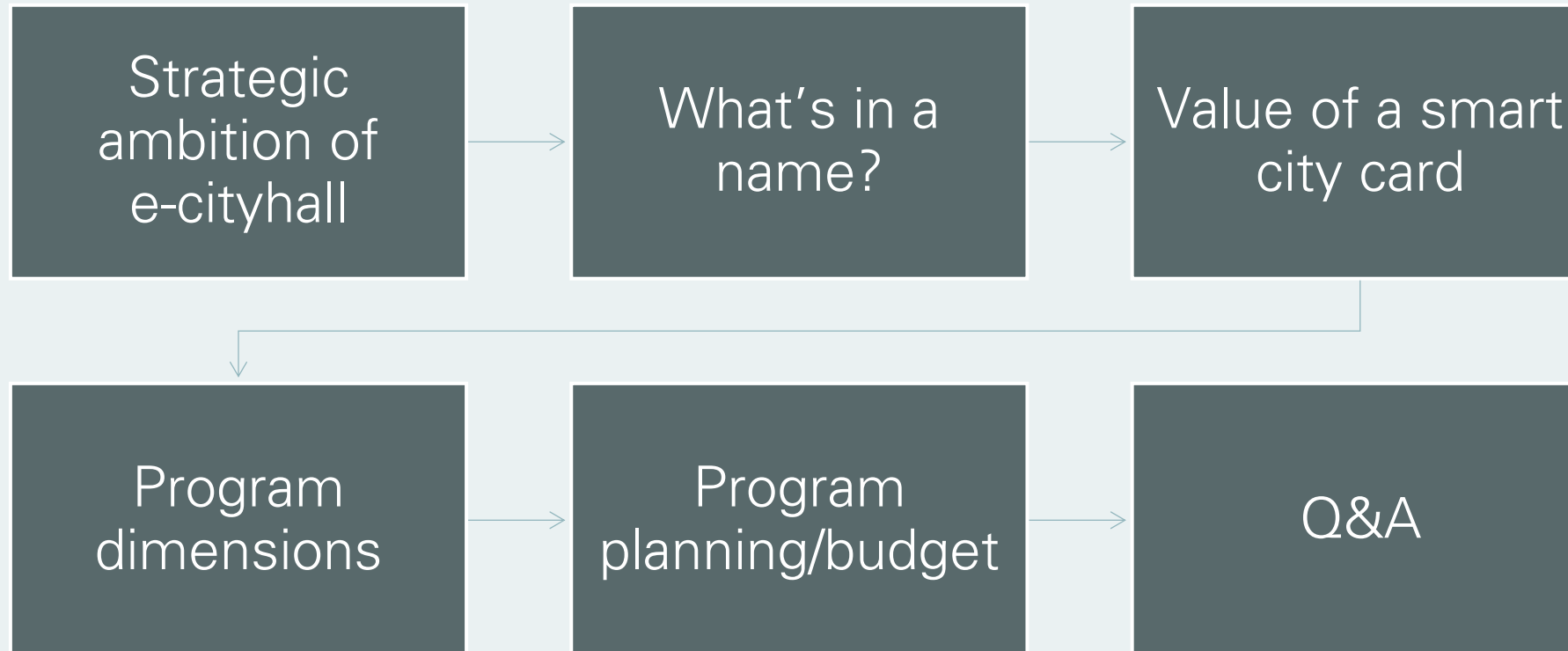
Digital Transformation
Citizen Services Chisinau

Smart City Card

Value proposition

City hall Chisinau
Date: 17/12/2024

Agenda



Strategic ambition of e-cityhall



Why?



Part of Digital Transformation Strategy

Execution of strategic plan 2021
Core building blocks for e-services
Smart Mobile app and smart e-card



Focus on Citizen Service Delivery enhancement

Portfolio of e-services
End2end service quality - ease of use
Offer service to IT literate citizens



Opportunity

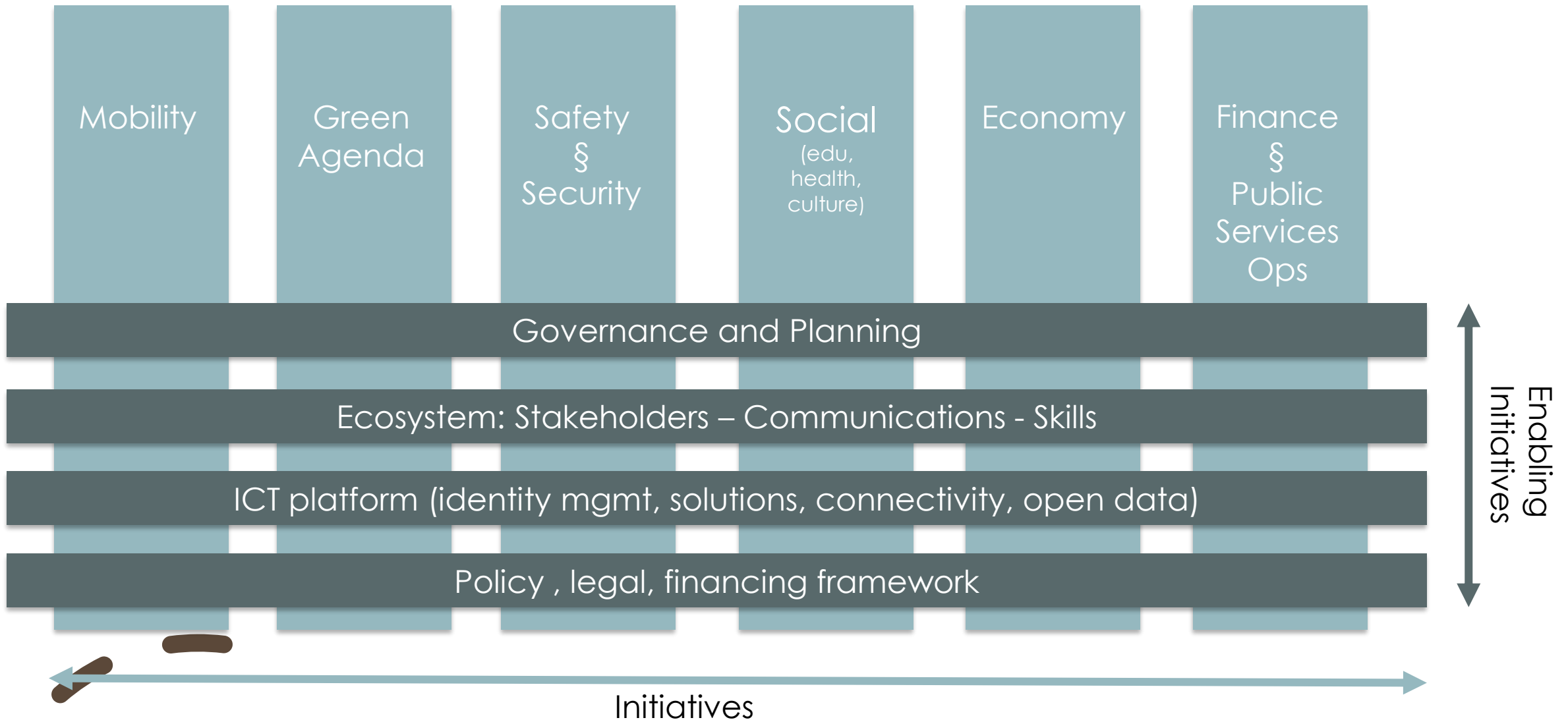
To leverage innovative technologies
To leverage partnerships
To optimize costs and investments



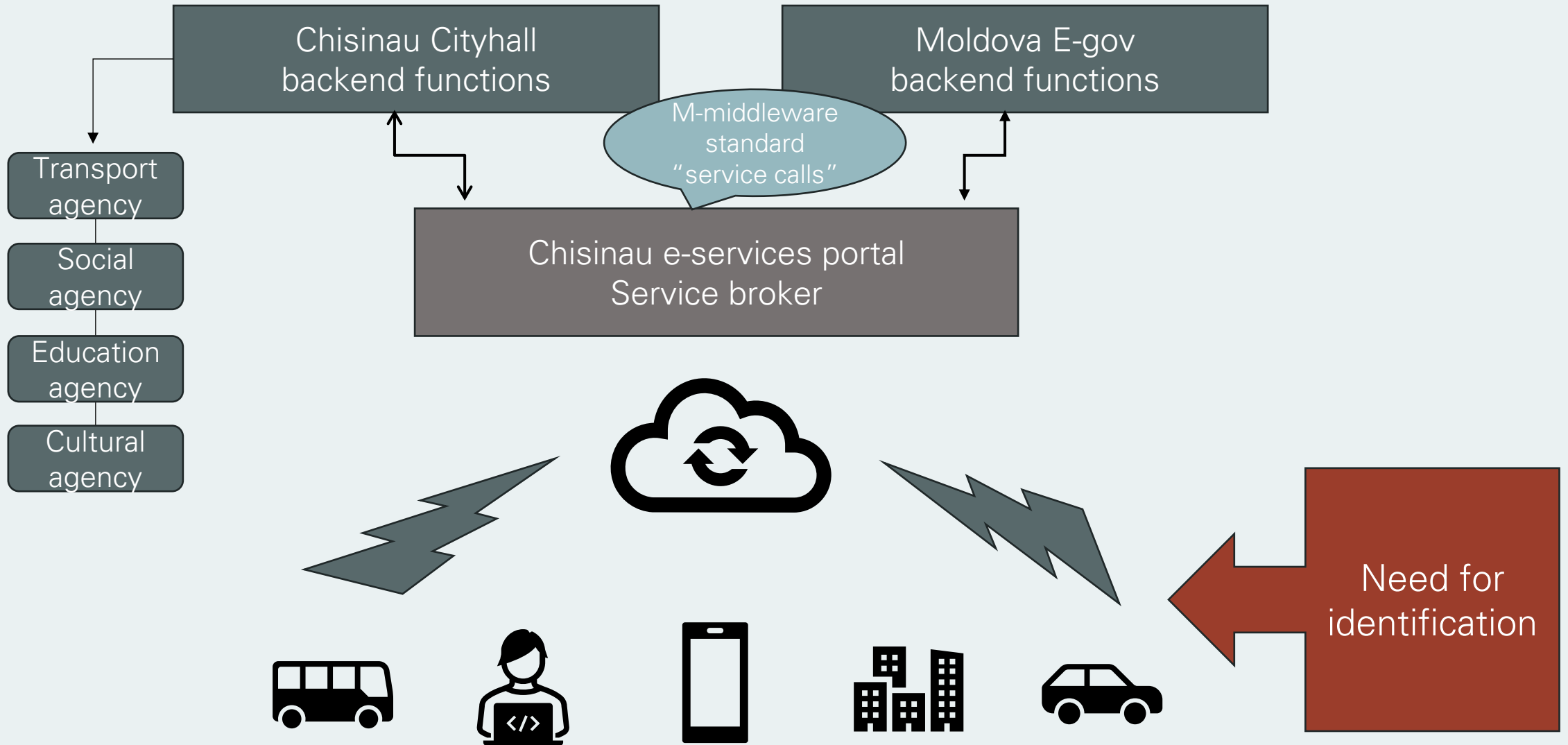
Global architecture for e-services

Egov and city hall backend
Citizen access and identification
Identity management = crucial service

Smart City Chisinau 2030 framework



Overall Chisinau e-services architecture



What is
a smart city
card?



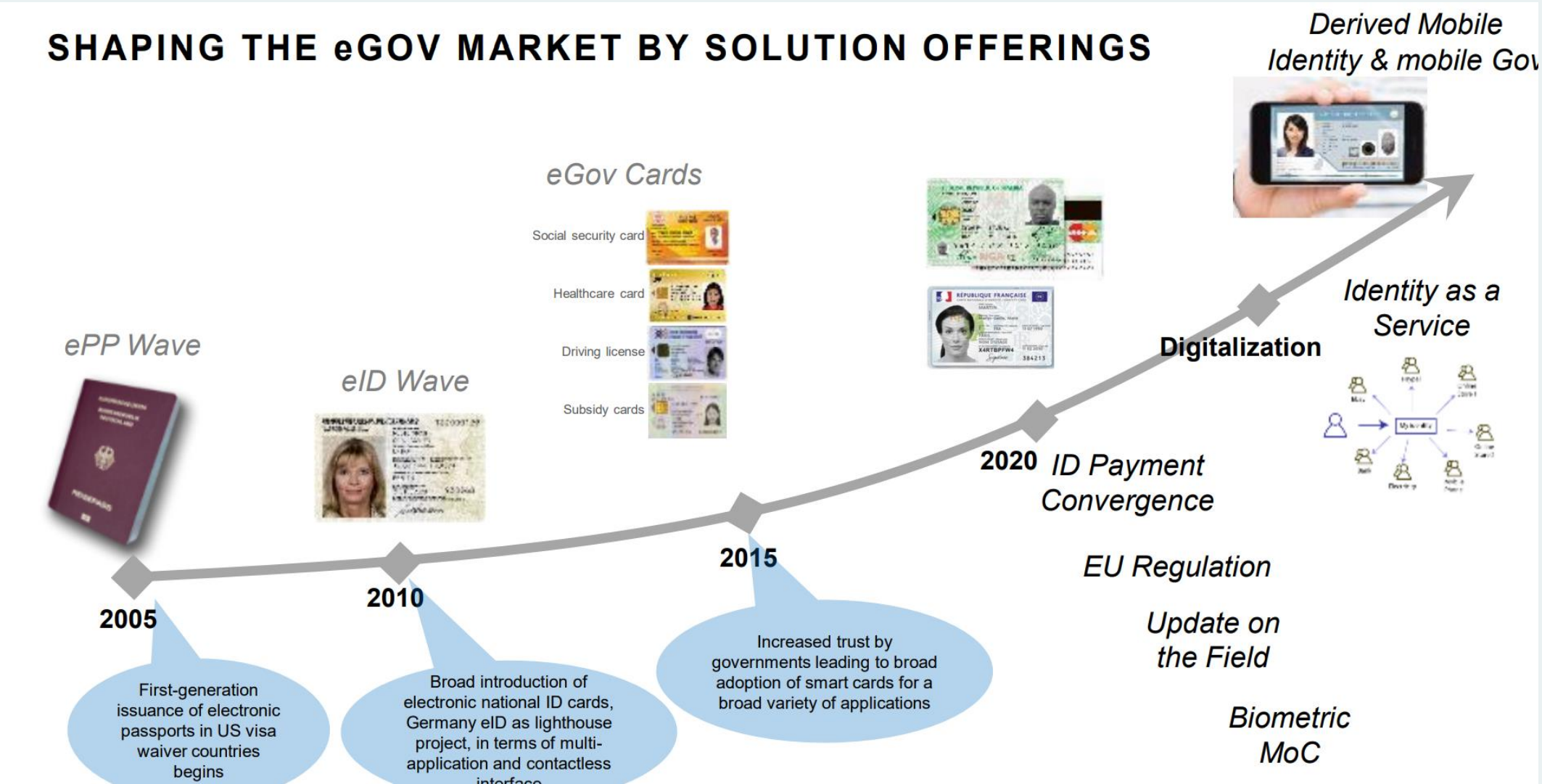


Product features: smart card – virtual smart card



- Smart Card (Bankcard format)
 - Intelligent
 - Memory (4K to 8K) and/ or microprocessor: state of the art – both
 - Contact and contactless: magnetic strip and antenna (ISO/IEC14443) - NFC
 - Payments certificates– EMV
 - Ticketing protocols: Mifare (Basic and DESfire V1)
 - Core functionality:
 - Identity management and authentication
 - Fully secured and encrypted
 - Payments: closed and open loop and e-wallet
- Virtual smart card – Mobile app (mID)
 - Apps with authentication/encryption features
 - Apps with payment services (e-wallet, or EMV – banking, MIA)
 - Apps with e-ticketing services (dependent on city, public service approach) Mifare
 - Apps to be developed (social security, loyalty program etc.)
 - Apps = f(application domain) e.g. e-ticketing
 - OR ONE Integrated APP

Generic trends in Smart cards



Mobile e-identity



The world is turning... **MOBILE!**



**MOBILE
ID CARD
DRIVER LICENSE**

Deployed:

- SWITZERLAND
- HUNGARY
- KOSOVO
- UK

POC

- AUSTRALIA
- AUSTRIA
- GERMANY
- U.S.

- Electronic ID (eID) and mobile ID (mID) are complementary,
- eID combined with mID brings new convenient usage with no compromise on security

Value of
a smart city
card?(and app)



Personal identification



- **Identity Verification in physical and digital settings**
 - Authentication: Identity proofing (government issued docs, or biometric checks)
 - Authorization: Granting permissions to services
 - Certification: Assure operational security and robustness of the mechanisms against specific criteria (standards, regulations, best practices around trust, security, interoperability, privacy)
 - Level of assurance: Moderate Assurance should be appropriate.= pragmatic
- **Access to Public Services**
 - Secure login to online portals
 - Transport ticket function (Account based ticketing)
 - Grants access to educational, health, or social security



Multi-functional



PUBLIC TRANSPORT PARKING CARD MUSEUM ZOO CARD SOCIAL BENEFITS CARD



Cityhall
launches
3 programs

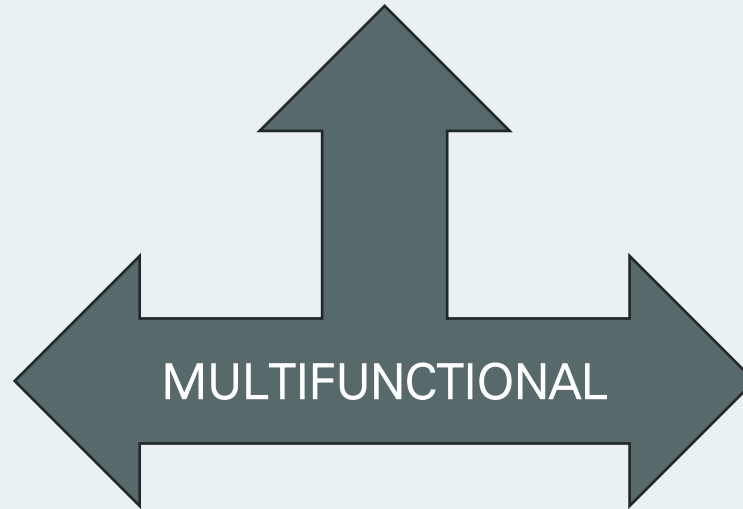


3 programs

E-Ticketing
Transport card



Smart City Card



Parking Card



Synergy with e-ticketing

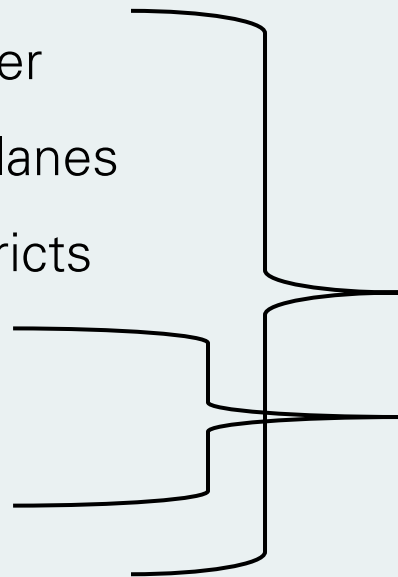


- **Technical**
 - Tap and go = contactless operations (card AND app)
 - Smart city card is also a transport/mobility card (mifare support)
 - Smart city card is also a payment card (EMV, MIA)
- **Operational**
 - Smart city card = Also transport card and parking card and....
 - Technical specifications of tenders e-ticketing and parking card should include support of smart city card model
 - Realize advantages of scale : Distribution of cards, Joint service desk

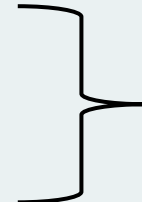
Synergy with e-Parking

- 5 e-parking target solutions:

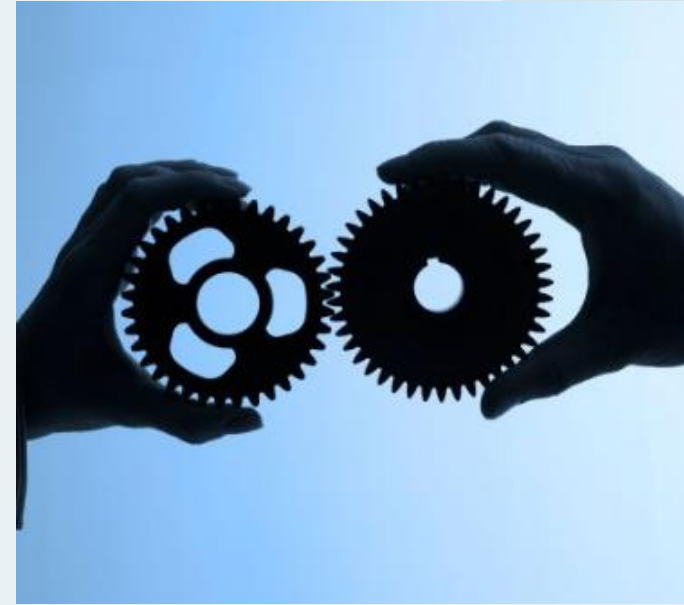
- Historical center
- Big roads and lanes
- Other city districts
- Park and Ride
- Residential



Payments
Account based

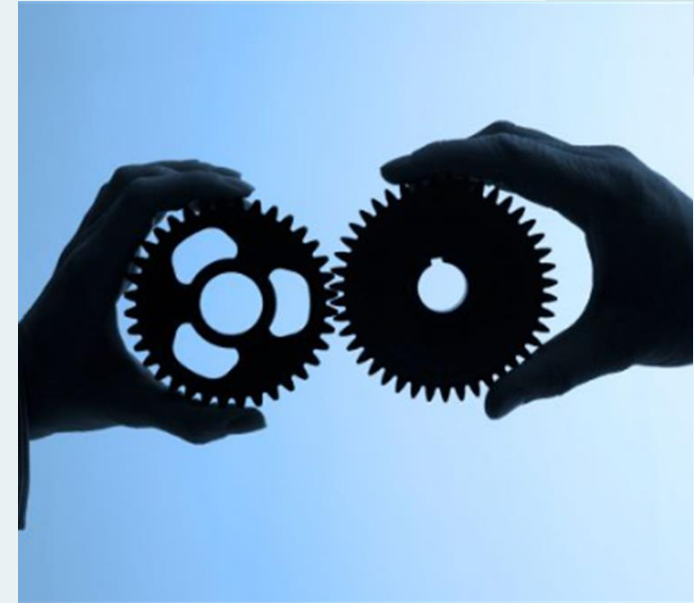


Smart City Card



Synergy with e-services program

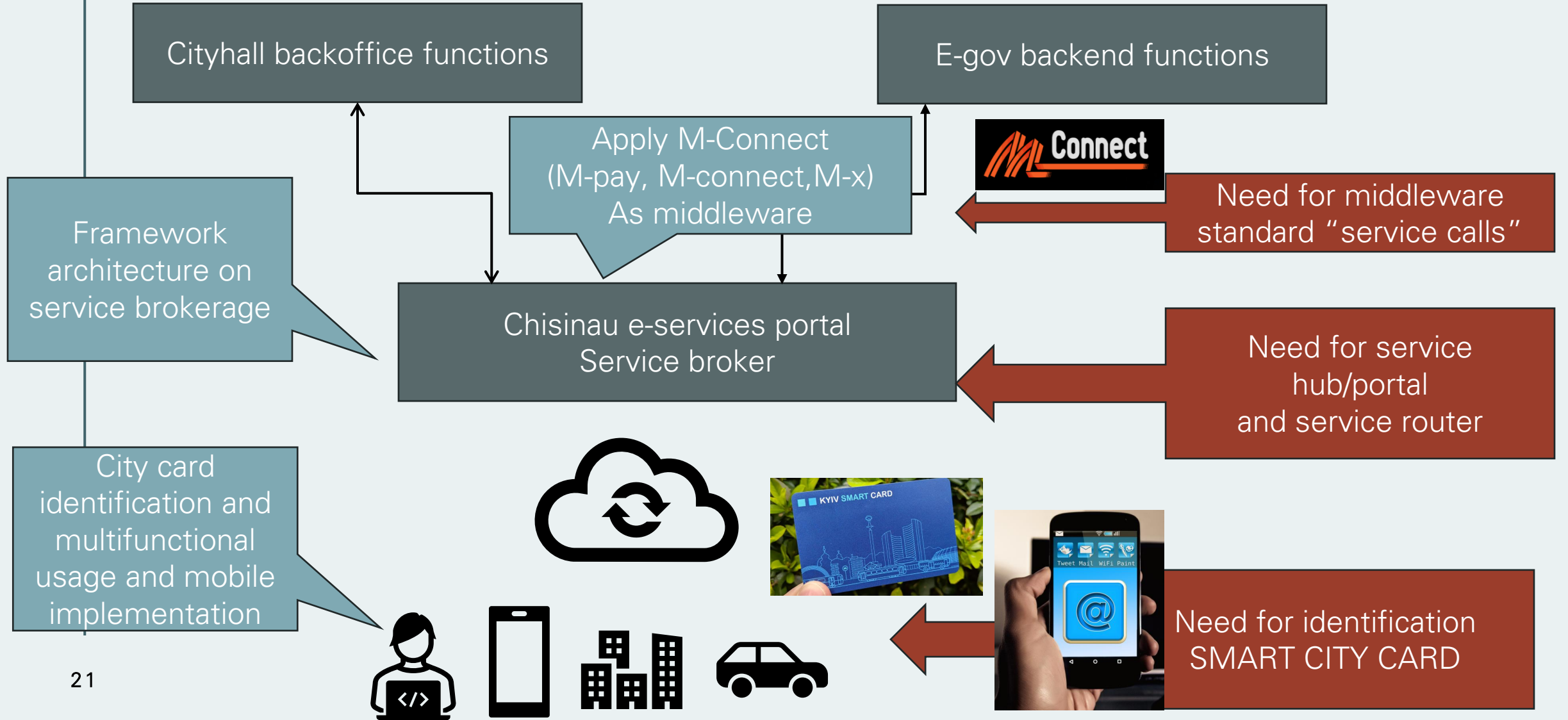
- Technical
 - Endorsement of M-protocols on Smart city card: MIA, M- Pass, M-connect, M-pay
- Operational
 - Development of cityhall e-services with M- technology
 - Gradual launch of new municipal “e-services” (integration of backends)
 - Candidates: Social security, Access cards (Museums, Zoo, other), Loyalty cards (e.g. students)



Program Dimensions



Overall Chisinau e-services architecture



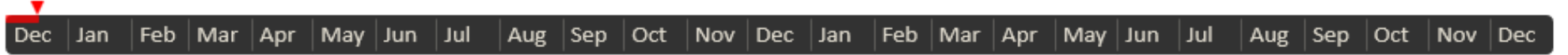
Program planning & budget



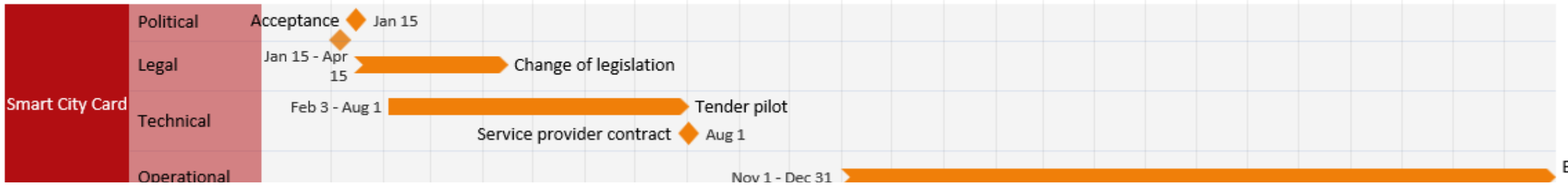
SMART CITY CARD PLANNING

Dec 4 - Dec 31

Today



2026

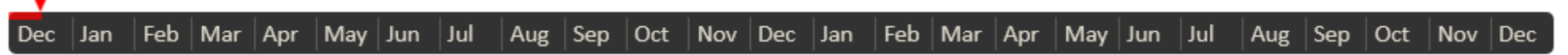


Entry into

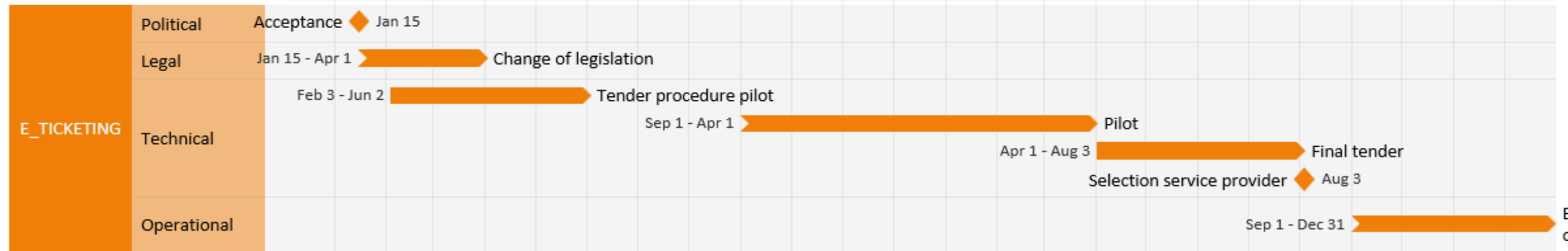
E-TICKETING PLANNING

Dec 4 - Dec 31

Today



2026

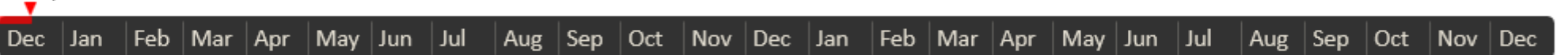


Entry into operations

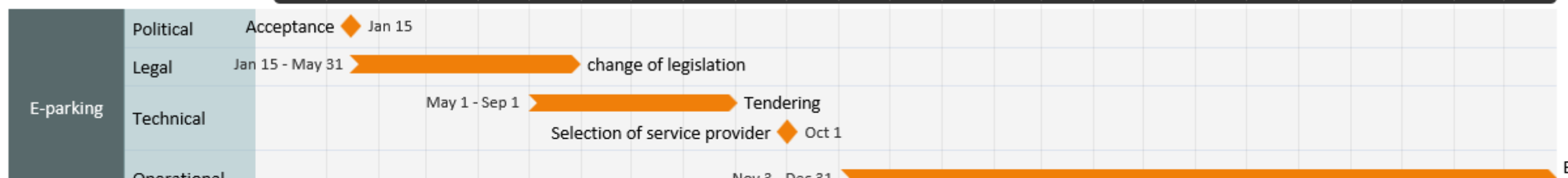
E-PARKING PLANNING

Dec 4 - Dec 31

Today



2026



Entry into

Budget Estimations

- CAPEX
 - E-ticketing 7.6 m€
 - Pilot 1.2m€
 - Smart City card 1m€ (or alternative business models)
 - E-parking 2 m€ (including public works)
- OPEX – annual base (guesss estimates: 10 to 15% of capex but other business models are more adequate (service provider, PPP))
 - E-ticketing 760 K€ (HW and software maintenance)
 - Smart city card 200 k€ (helpdesk included)
 - E-parking 150 K€

Conditions for success



Market adoption

The introduction of this new “tool” will require cultural, business and technical changes.

The “product/service” should be sold to the target audience

Small and easy is beautiful



Service quality

Ease of use, ease of deployment, ease of integration(e.g. e-ticketing)



Service sustainability

Budgetary exercise which is in balance (income and cost model)

Balanced service offering in between city hall and service partner

Multimesc

Wilfried Grommen
Change manager



Q & A

