

PMc21

Project Management Convention for GN4-3 & GN4-3N



Service Delivery and Uptake

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As part of the GÉANT 2020 Framework Partnership Agreement (FPA), the project receives funding from the European Union's Horizon 2020 research and innovation programme under Grant Agreement No. 856726 (GN4-3).

Agenda

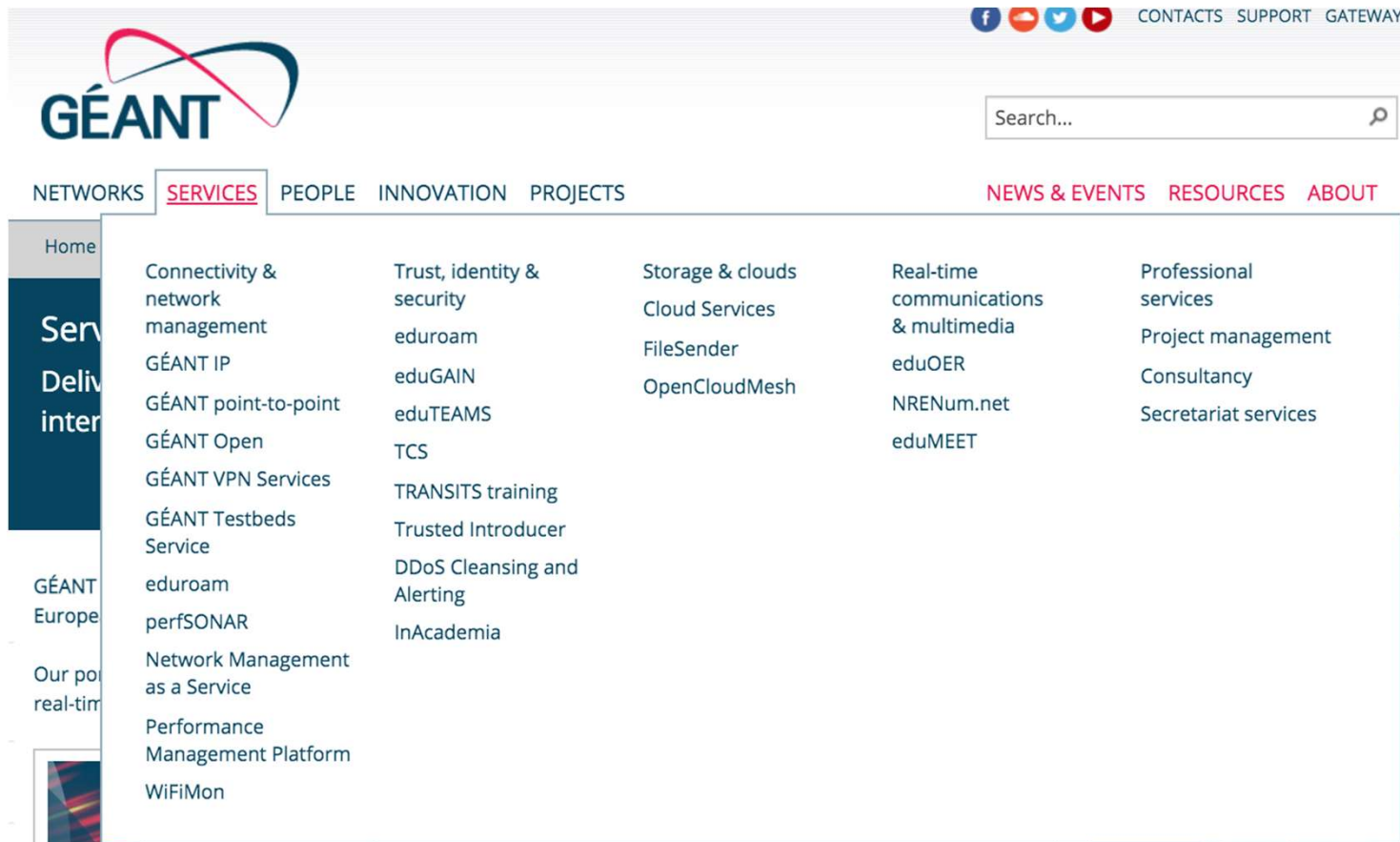
Service Delivery Analysis

What do we know from NRENs?

Introduction to the break out sessions

Break out session





The screenshot shows the GÉANT website with the 'SERVICES' menu expanded. The navigation bar includes 'NETWORKS', 'SERVICES', 'PEOPLE', 'INNOVATION', and 'PROJECTS'. The 'SERVICES' dropdown menu is organized into six columns:

Connectivity & network management	Trust, identity & security	Storage & clouds	Real-time communications & multimedia	Professional services
GÉANT IP	eduroam	Cloud Services	eduOER	Project management
GÉANT point-to-point	eduGAIN	FileSender	NRENum.net	Consultancy
GÉANT Open	eduTEAMS	OpenCloudMesh	eduMEET	Secretariat services
GÉANT VPN Services	TCS			
GÉANT Testbeds Service	TRANSITS training			
eduroam	Trusted Introducer			
perfSONAR	DDoS Cleansing and Alerting			
Network Management as a Service	InAcademia			
Performance Management Platform				
WiFiMon				

For each service...

Do we know?

- 1. What is the service?**
- 2. Who are the users?**
- 3. What is the value of the service?**
 - Or: **Why would a user use the service?**
 - Or: **Why would someone pay for the service?**

Is it clearly defined and transparently presented?



Answers to previous questions:

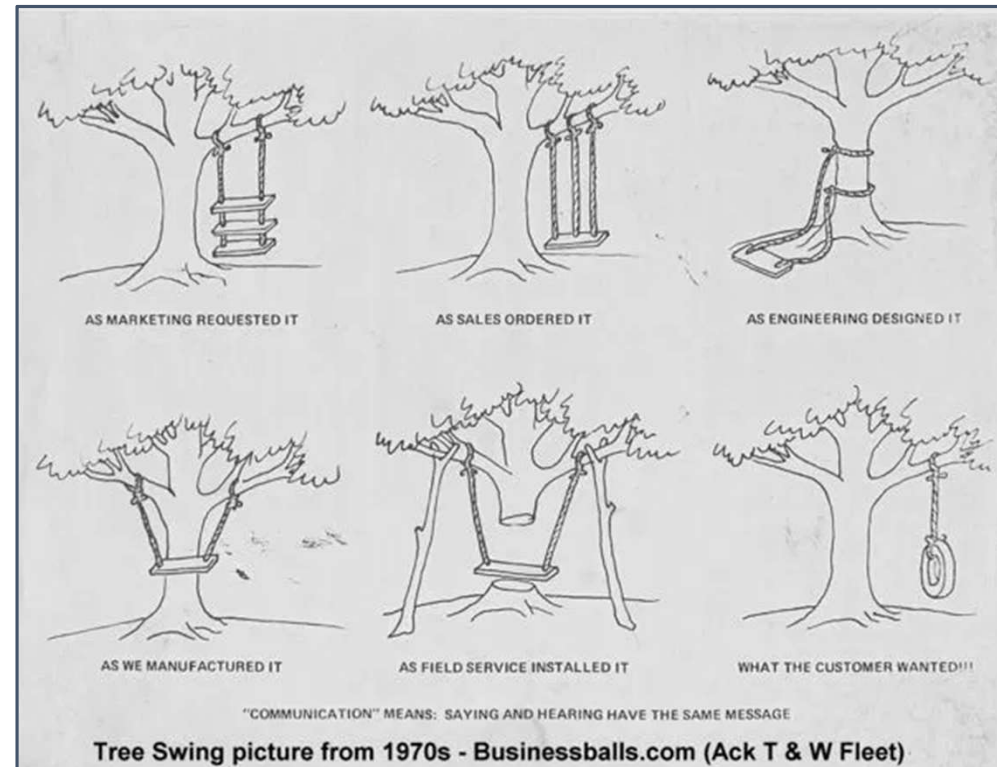


Determine

- Are we delivering what we are offering?
- Are we targeting the right audience?
- Are we promoting the services correctly?

And impact:

- Promotion
- Uptake
- Users' satisfaction
- ...



<https://boingboing.net/2013/03/14/history-of-tree-swing-draw.html>

<https://www.businessballs.com/amusement-stress-relief/tree-swing-cartoons-new-versions/>

We present services per technology



Connectivity &
network
management

GÉANT IP

GÉANT point-to-point

GÉANT Open

GÉANT VPN Services

GÉANT Testbeds
Service

eduroam

perfSONAR

Network Management
as a Service

Performance
Management Platform

WiFiMon

Trust, identity &
security

eduroam

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& multimedia

eduOER

NRENum.net

eduMEET

Professional
services

Project management

Consultancy

Secretariat services

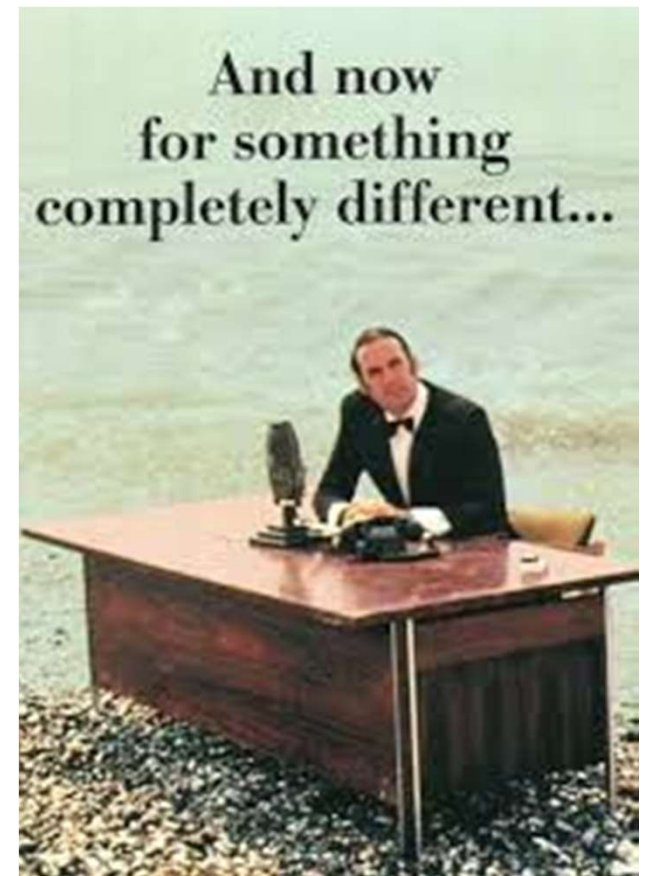
**Can we easily say
whom each service is for?**

Can our users?

Service Analysis Perspective

A set of current production services analysed from the following perspectives:

- User groups
- Production delivery and operations
- Delivery chain
- Uptake measurement
- Governance model



Service Delivery Analysis



- **Production services**

- **14** (Not all) services took part in this analysis
- All WP5 (**4**) and WP6 (**5**) production services
- **2** WP4 services and **3** WP7 services (Thanks Maria, Toby, Akil, Mian)
- Participation on a voluntary basis

- **Some development work**

- **4** WP6 candidates for new services
- Not all aspects defined or fixed yet (work in progress)



Service delivery questions

- What is the service?
- Who are the users?
- What is the delivery model?
- How is the production delivery organised?
- How is the uptake measured?
- What is the governance/steering model?



What is service offering?



Provide software

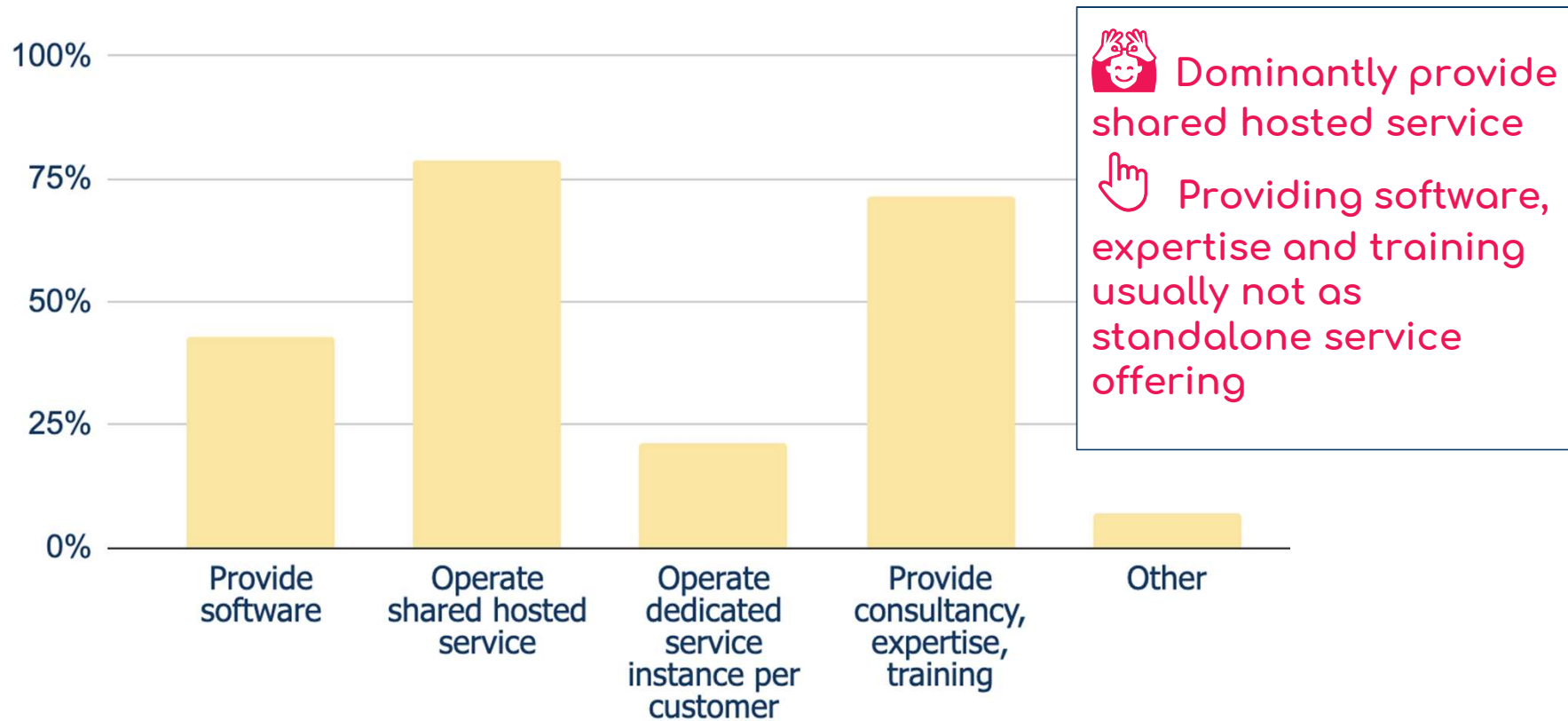
Operate shared hosted service

Operate dedicated service instance per customer

Provide consultancy, expertise, training

Other

What is service offering?



Who are service users?



Individual end
user -
researcher,
student...

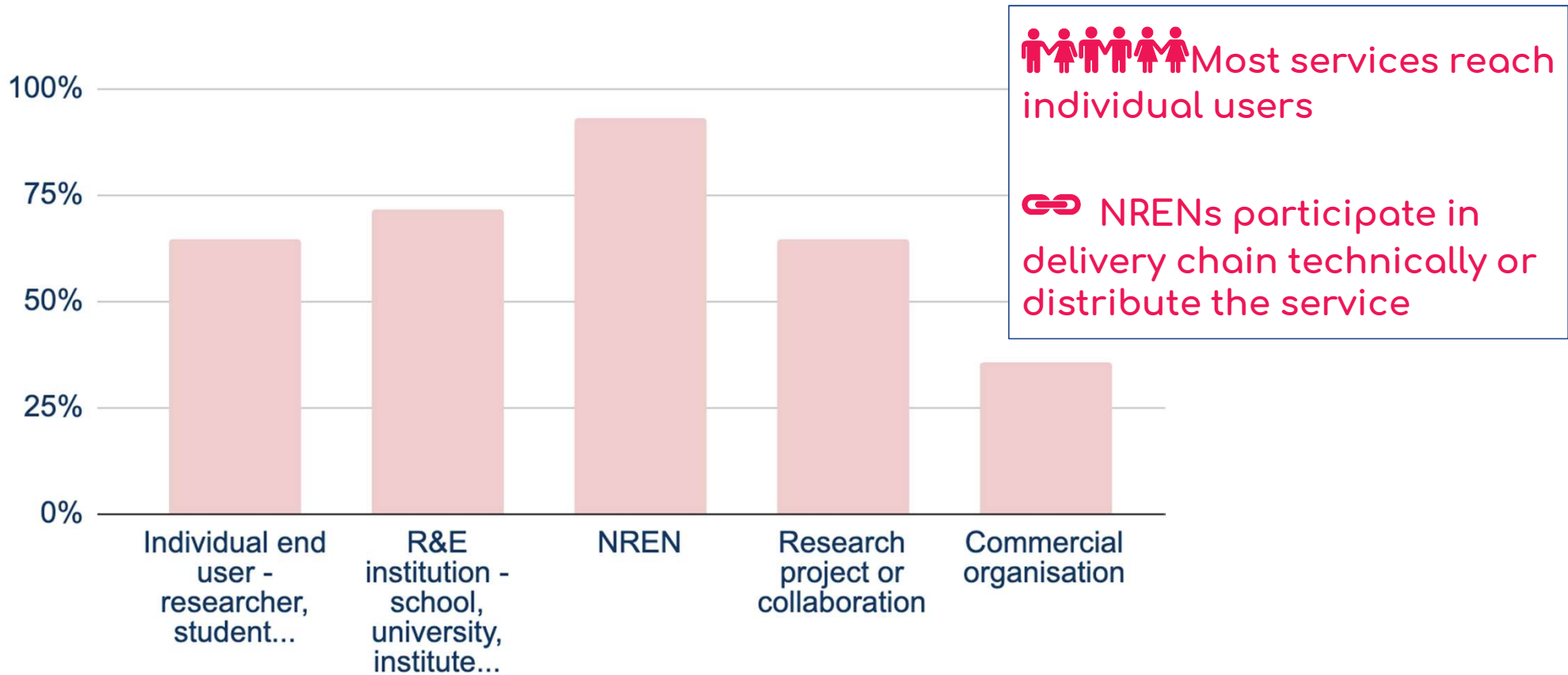
R&E
institution -
school,
university,
institute...

NREN

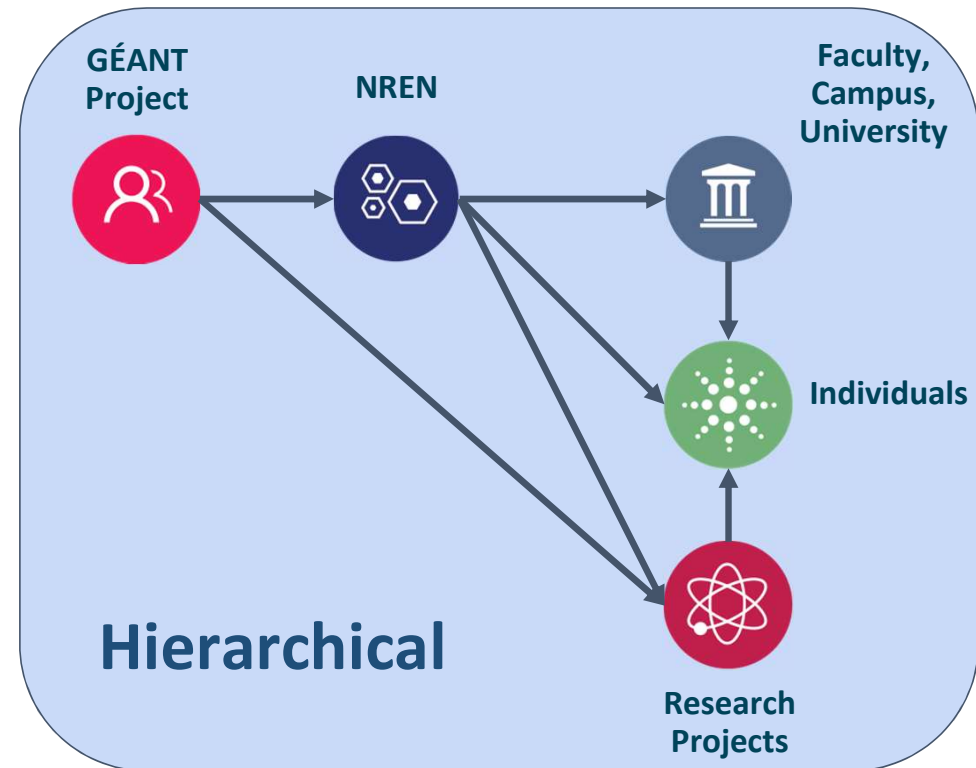
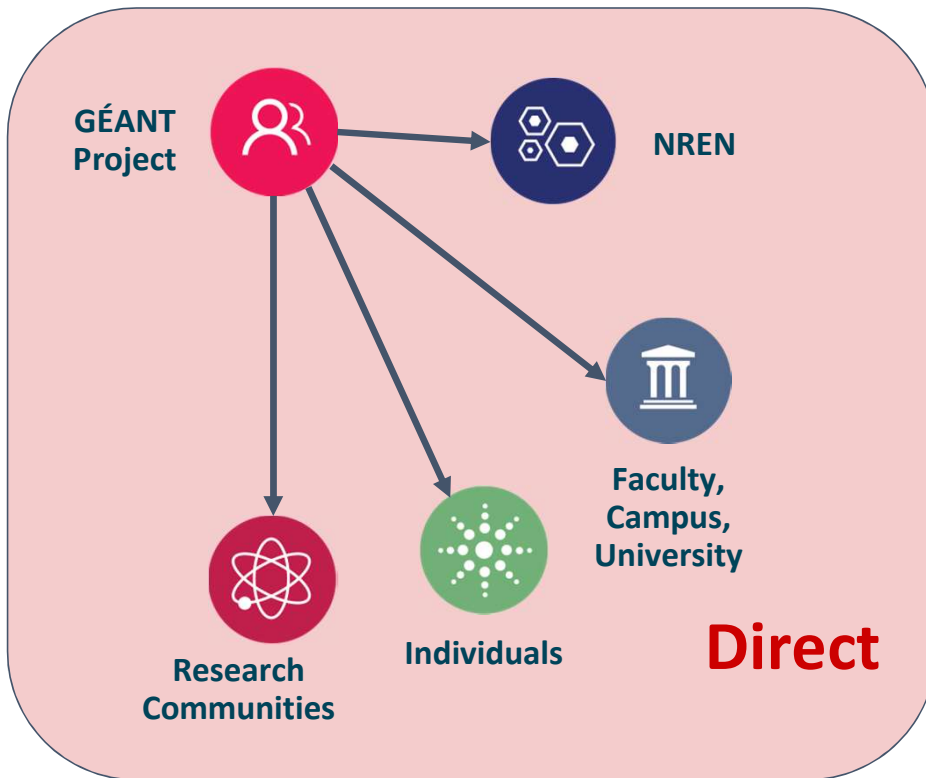
Research
project or
collaboration

Commercial
organisation

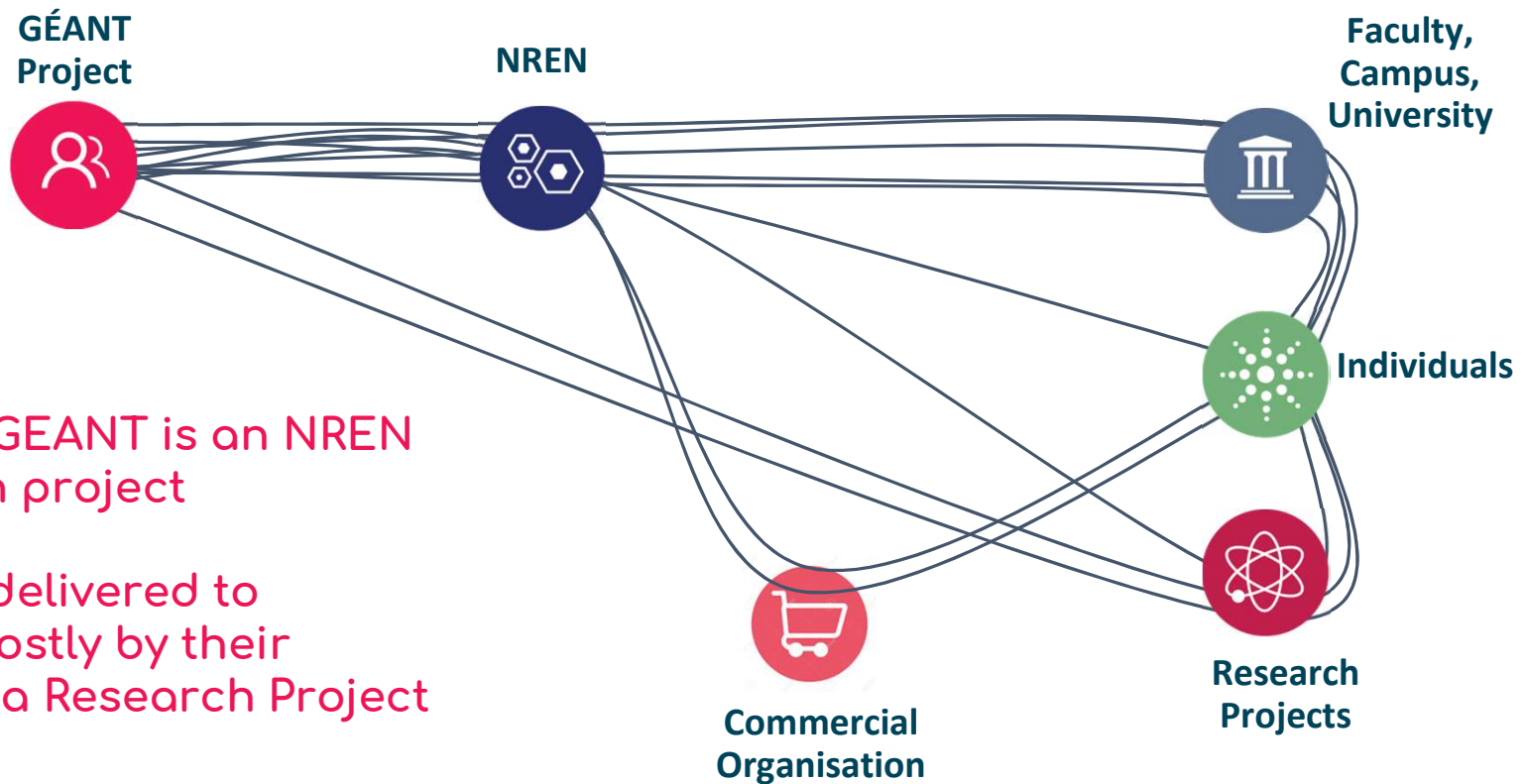
Who are service users?



What is service delivery chain



What is service delivery chain



First hop for GEANT is an NREN or a Research project

Services are delivered to Individuals mostly by their Institution or a Research Project

Production service delivery - Operations team



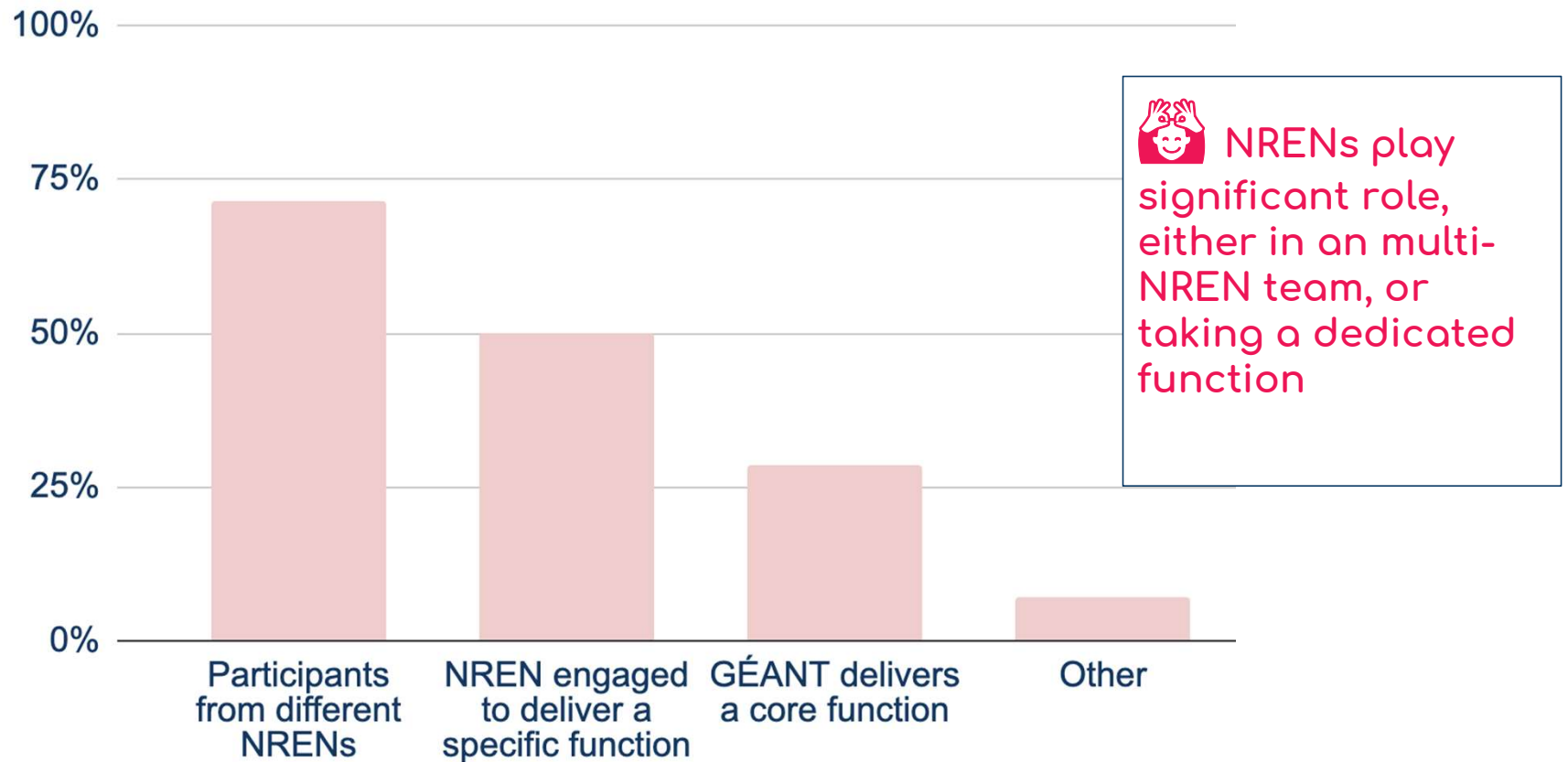
Participants
from different
NRENs

NREN engaged
to deliver a
specific function

GÉANT delivers
a core function

Other

Production service delivery - Operations team

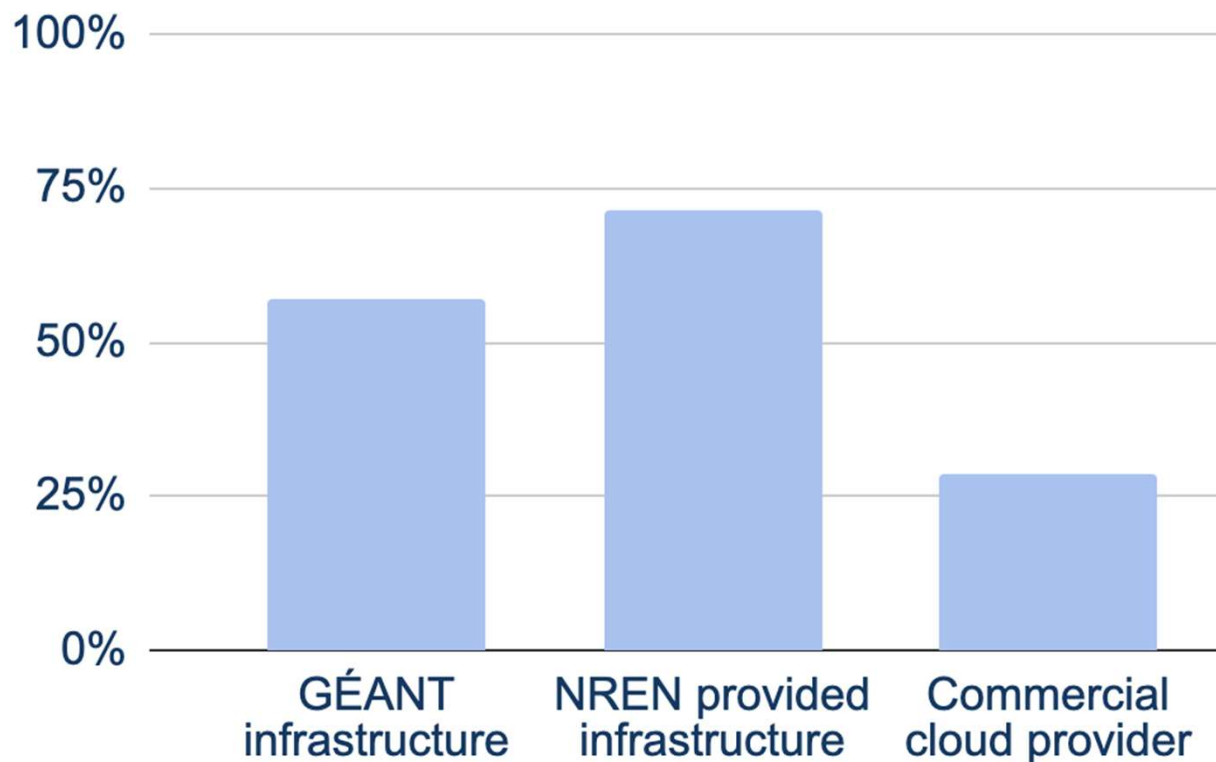



Production service delivery - Infrastructure




GÉANT infrastructure NREN provided infrastructure Commercial cloud provider

Production service delivery - Infrastructure



 These stats show usage of infrastructure providers and not absolute numbers of VMs provided

 NRENs play significant role, usually combined with providing service team

Production service delivery - Support

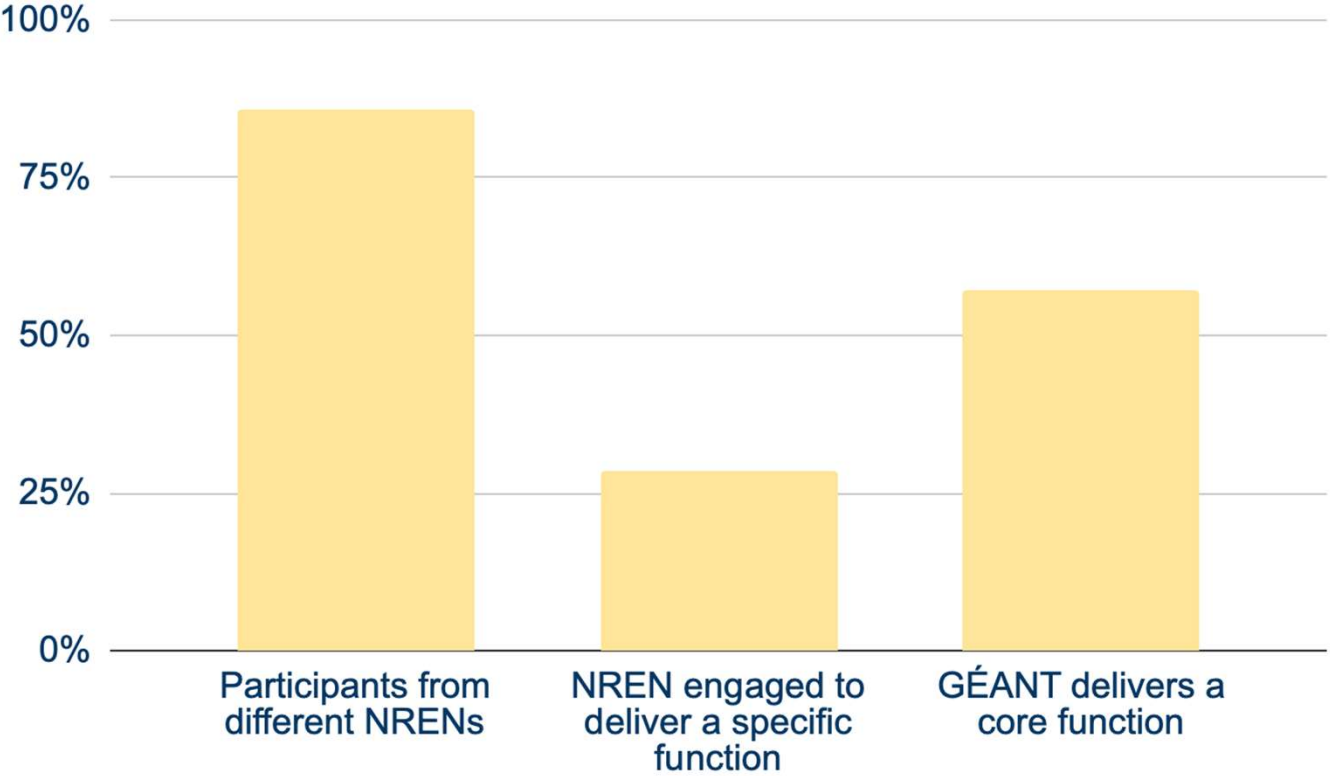


Participants from
different NRENs

NREN engaged to
deliver a specific
function

GÉANT delivers a
core function

Production service delivery - Support



Uptake measurement - HOW



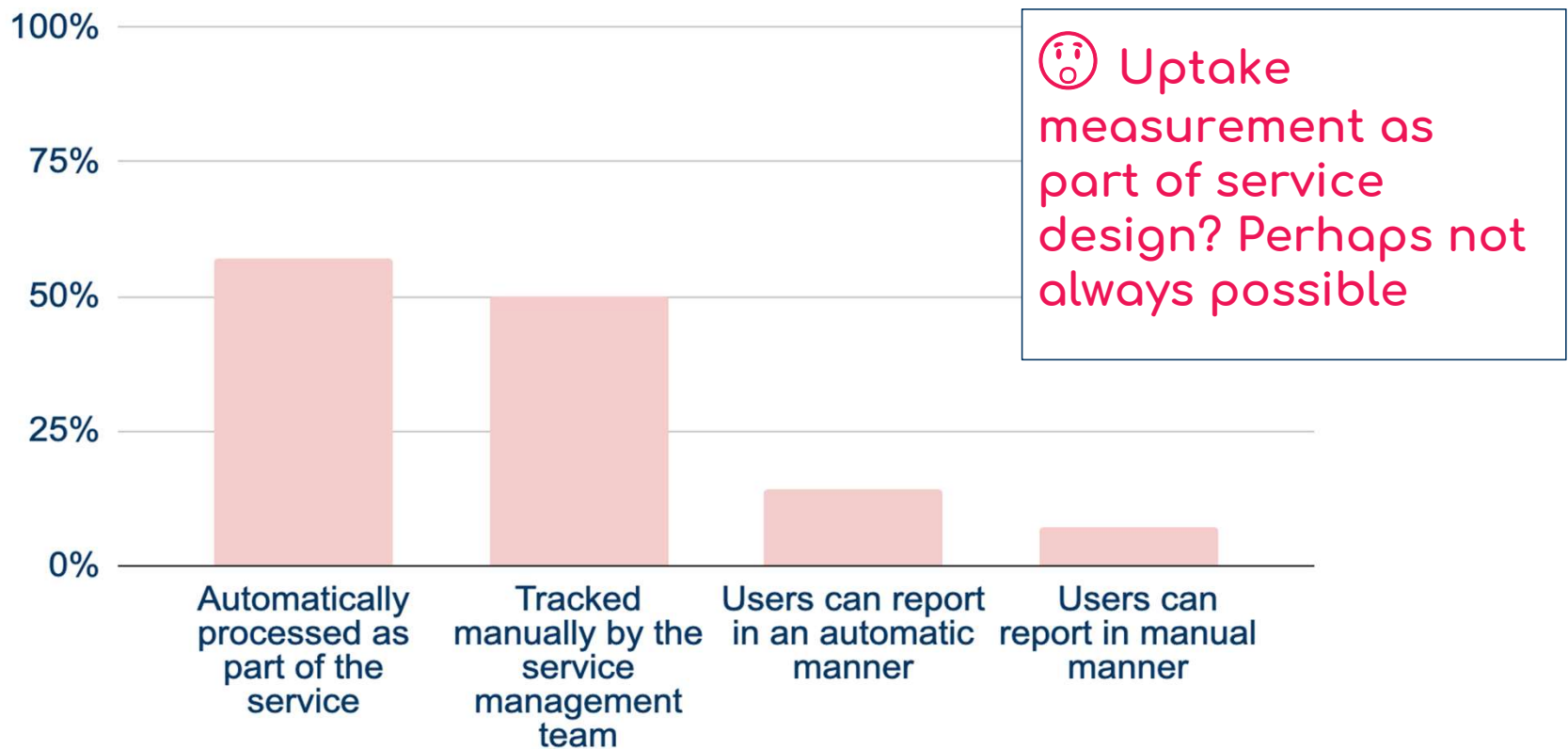
Automatically
processed as
part of the
service

Tracked
manually by the
service
management
team

Users can report
in an automatic
manner

Users can
report in manual
manner

Uptake measurement - HOW



Uptake measurement - WHAT



Individual
user uptake

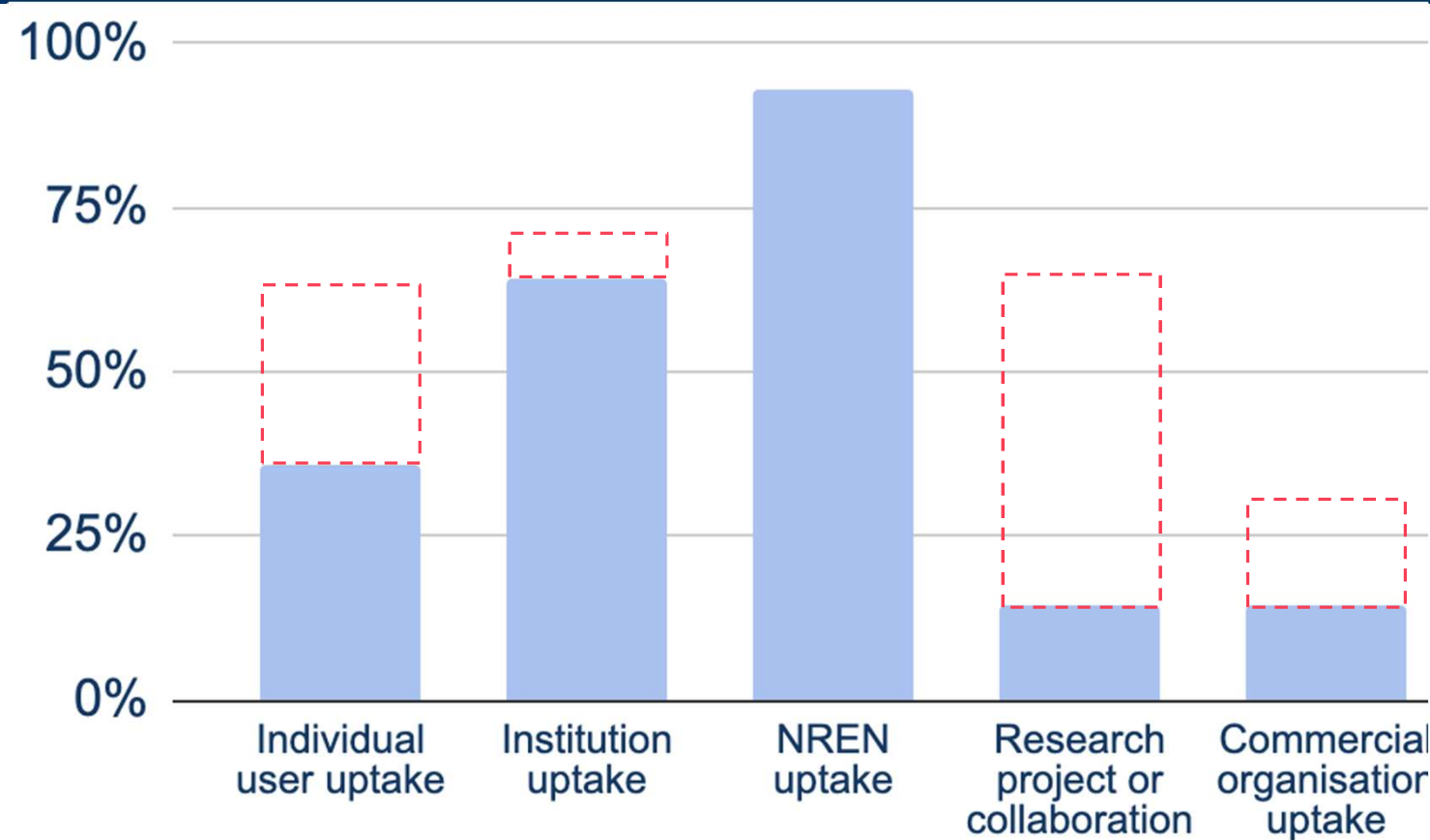
Institution
uptake

NREN
uptake


Research
project or
collaboration

Commercial
organisator
uptake

Uptake measurement - WHAT



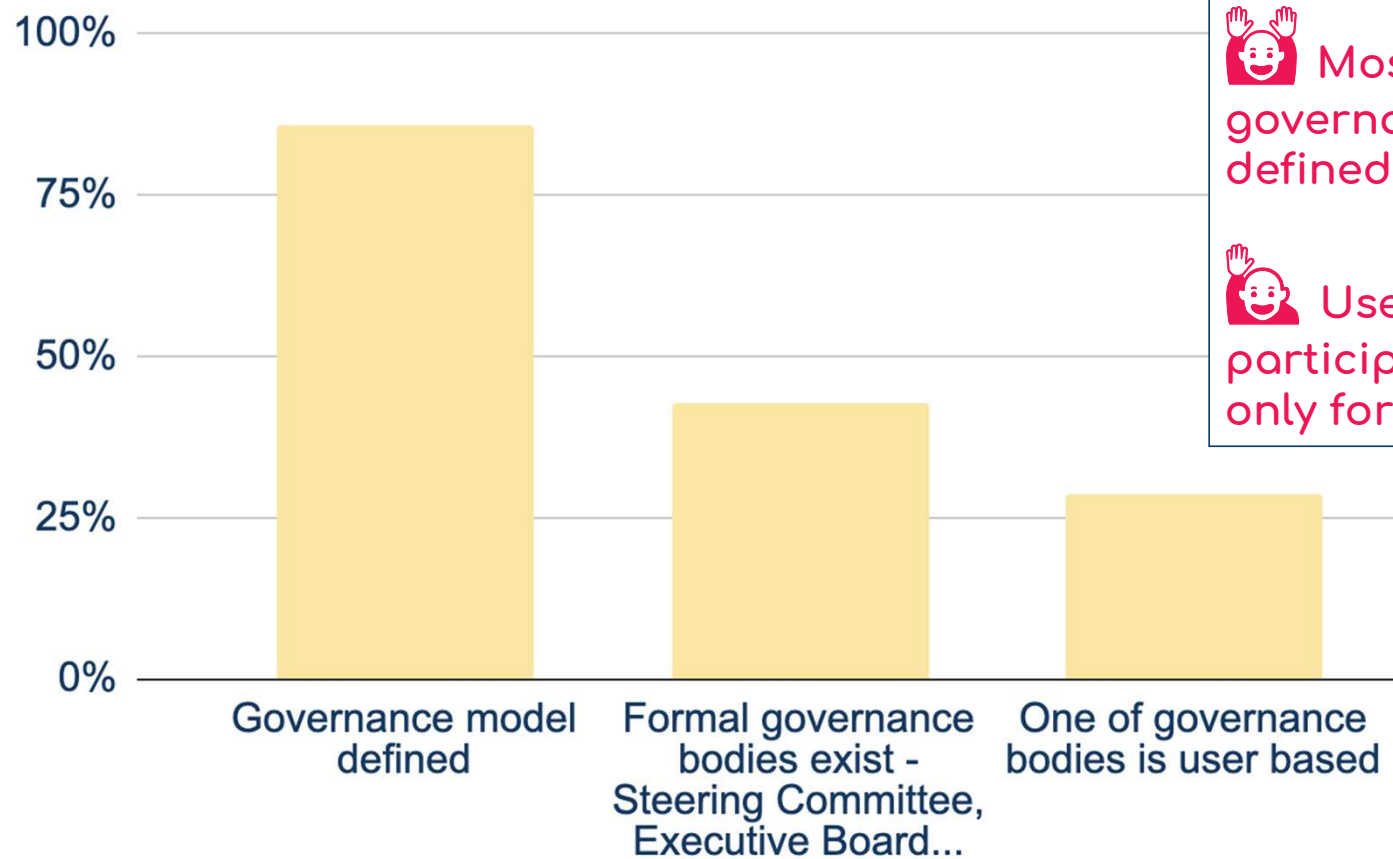
 NREN and Institution uptake is well tracked


 End users and research collaborations uptake is difficult to measure - price of running privacy preserving services, something else?

Governance model
defined

Formal governance
bodies exist -
Steering Committee,
Executive Board...

One of governance
bodies is user based



 Most services have governance model defined

 Users formally participate in governance only for some

- RARE, LoLa, DPP and OAV training WP6 work in scope
- They all **follow the similar pattern as production services:**
 - Most of them include software development and consultancy
 - All are targeting the same user groups:
NRENs, institutions, individuals, projects
 - They all have direct and hierarchical delivery chain model
 - The hierarchical delivery chain model is the same:
GÉANT project -> NREN -> end institution -> end user
 - Operations team come from NRENs
 - Infrastructure: GÉANT and NRENs
 - Uptake depends on NRENs, institutions, individuals

NRENs' Have Key Roles in Service Delivery

- **Service development and operation**
 - Create and develop services
 - Provide infrastructure, support
- **Service delivery chain**
 - Direct users
 - **First point of contact**
Towards institutions, users, projects

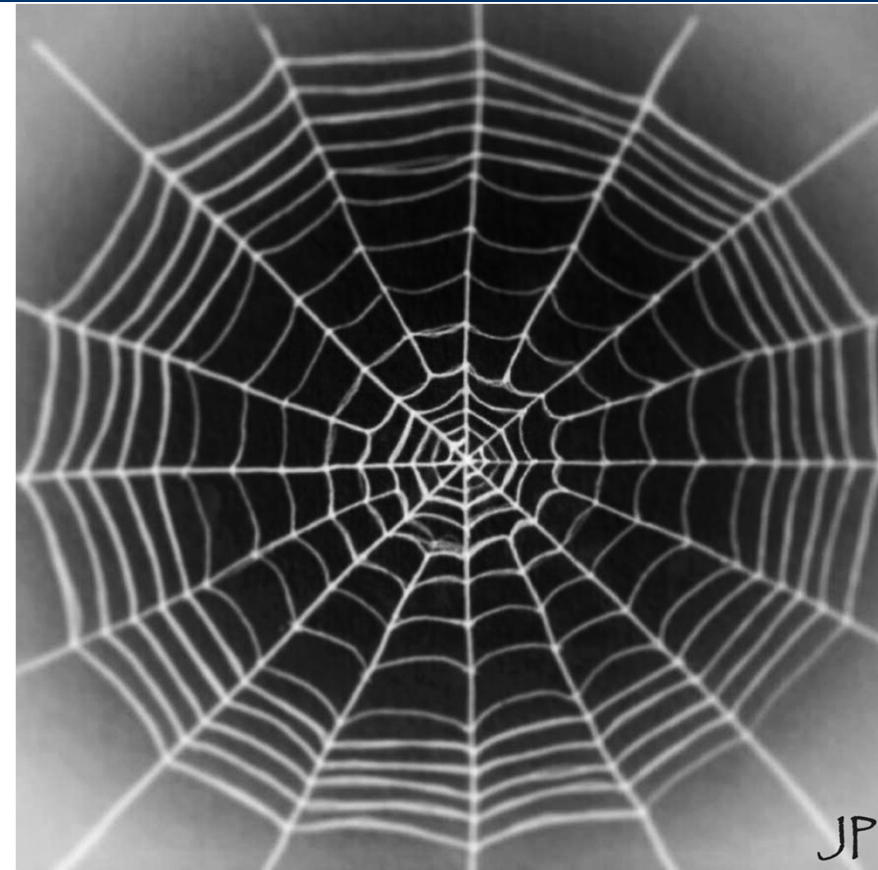


Image credit: Jean-Philippe Frimat

The analysis raises even more questions



Services address several user groups:

- Have we adjusted the approach per user group?
- Have we adjusted the value proposition per user group?
- How are we addressing the individual links in the hierarchical delivery chain?

Importance of NRENs:

- Are NRENs aware of all their roles
- Do we work with NRENs around each of their roles:
- development, operations, delivery and sustainability
- How are we ensuring service sustainability wrt NREN participation
- How are we making sure that bigger changes in NRENs do not impact service sustainability?

- **Per-user and service delivery segmentation emphasises different actors**
- **Services are targeting a broad audience - profiling is needed**
- **NRENs play key roles in service development, operations, delivery and sustainability**
 - Ensuring NREN commitment for all 4 aspects is crucial
- **8 out of 14 services have hierarchical delivery chain with NRENs as 1st PoC**
 - Without NREN engagement - service might not reach the user
- **Service uptake measurement should be considered in the design phase**
- **Service governance structure defined with less than 50% of them with hierarchical structure**
- **The results call for further analysis...**

Thank you

Any questions?



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Beatrix Weber, WP3 T1 TL, GÉANT



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The NREN view - What is the NREN perspective on service uptake?



- How do our services fit into NRENs' portfolio?
- How do NRENs promote GÉANT services?
- What are influencing Factors and resulting challenges on GEANT Service Uptake from NREN perspective?
- What do we do so far?

How do our services fit into NRENs' portfolio?

- Complementary
- Value for money
- Provide non-commercial, GDPR/Privacy compliant solutions
- Allow NRENs to offer richer service portfolio with small/no development resources
- Cater for niche use cases
- Offer R&E tailored features/services that
 - would not be possible to develop nationally
 - are not available on commercial market

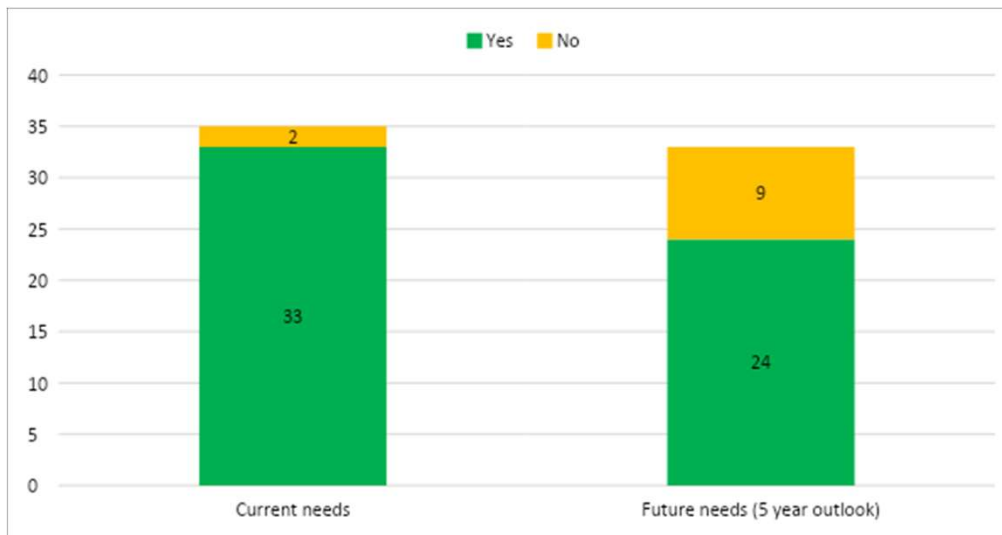


Reminder: NREN Satisfaction Survey Feedback



- No survey in 2020 due to COVID
- Next satisfaction survey due Feb 2021

Does GÉANT's service portfolio meet your NREN's needs ...

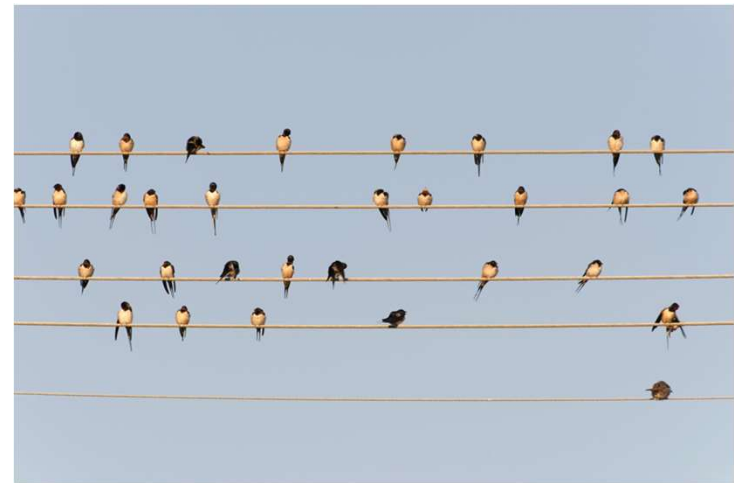


- At start of the project, large majority of NRENs **agrees that Service Portfolio meets their needs**
- NRENs comments demanded more activity in
 - new network technologies,
 - 5G, ICT Infra & Media support
 - Cybersecurity
 - and commercial cloud offerings

(→which would largely be in line with planned project activities)

How do NRENs promote GÉANT services?

- Services are usually not promoted as “GÉANT” services
- Absorbed into own outreach and marketing activities
- Differs by: NREN set up, relationship with constituencies, remit, resources, service type



Observe shift since GN4-2:
more involvement of GN4-3 to promote services on behalf of or in collaboration with the NRENs

Influencing Factors and resulting Challenges on GEANT Service Uptake from NREN perspective



General Influencing Factors

- **"internal"**
 - Available funding and staff resources
 - Access to additional funding sources
 - NREN service scope
 - Active service promotion and engagement
- **"mix"**
 - NREN user base
 - National delivery chain
 - Formal and informal relationship between national stakeholders
- **"external"**
 - Large science user groups or facilities in country
 - Maturity of R&E sector (level of digitisation)



Service related challenges

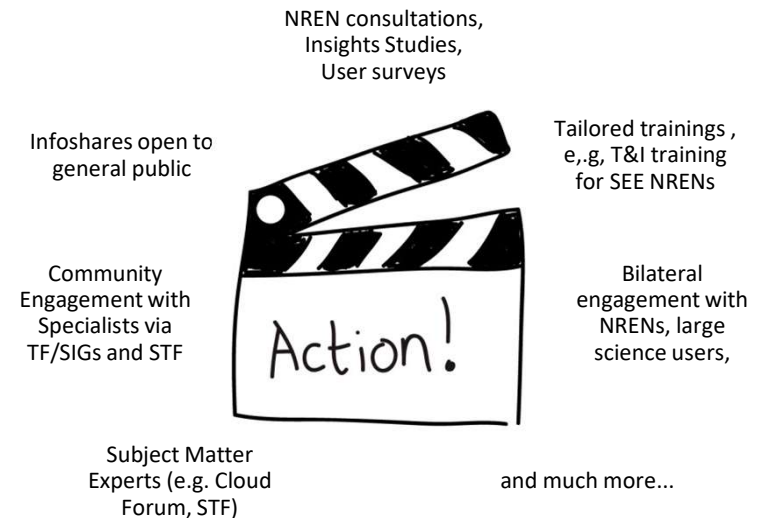
- **Business related**
 - Lack of resources/ business urgency
 - Lack of known national use cases
 - Lack of skills in NRENs to deploy/ adopt services
 - Lack of outreach staff in NRENs to promote service
- **Service related**
 - Unclearity about use cases, adoption and operational costs
 - Commercial solutions preferred by constituencies
 - Service development not fast enough
 - Concern about longevity and reliability
 - Different technical approach to same service

What do we do so far?

- WP2 and WP3 Activities, dedicated Service WP Outreach Tasks, GLAD
- Annual Project Plan, GN4-3 Stakeholder Engagement Plan, Marketing Plan and Training Plan



- Develop NREN by NREN/ Service by Service understanding
- multi-channel/ multi-tier engagement
- Engagement on technical and management level
- work together across WPs
- Tailored adoption support solutions



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Introduction to the Breakout sessions



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Introduction to the break out session



- What we discussed at the PMC 19 – value proposition
- What was recommended by EC Reviewers
- Questions for the break out session

As a reminder... the discussion from the PMC19

- Value definition depends on the stakeholder
- Value for Money - Why would someone pay for the service (EC, NREN...)
- Established service; uptake defines the value
- Ensure 'it' delivers what stakeholders want/need
- Ensure 'it' delivers VFM, user satisfaction, ROI (not always easy to measure)
- This definition should be re-assessed periodically
- Also these values need to be promoted and communicated
- Sometimes NRENs and users are not aware of all the services

5. EC Recommendations



- Run a **business model analysis** prior to new service development
- Make a **benchmark analysis** for the main services provided by GÉANT
- Indicate the **total cost of running the main services**
- **Promote** use of own services **and use** internal **services** whenever possible
- **Find and develop new services** that enhance and put in value the GÉANT network.

5 questions for 45 minutes:

1. How can we determine and measure the **value** of our services?
2. How to **increase the uptake**?
3. What should be **improved** in the delivery chain and how?
4. How to ensure **sustainability** of service operations?
5. How to better incorporate EC Recommendations?

Thank you

Any questions?



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5. How to better incorporate EC Recommendations?

1. How to Determine and Measure **Service Value**

- When is the value proposition aligned with the stakeholders:
 - Which PLM process phase?
 - Which project preparation phase?
 - How often is the alignment process repeated?
- How does the process from the value proposition to the service uptake measurement look like?
 - How should it look like?
- How is the value proposition expressed
 - In the project preparation phase
 - In the service development phase
 - In the production phase

2. Service Uptake and Usage Accuracy



How to get the exact numbers about the uptake and get it fast?

- What do we measure, and what does it say about the service uptake?
- What can we measure vs. what we need to measure to get the exact result?
- How can we improve the process of gathering the information about the service usage
- How to know if a service is used?

Uptake <> usage

Site visit <> software download <> software installed <> software used

2. Service Uptake / Usage Improvement



How to increase service uptake / usage

- Increase the number of users from the current user groups?
- New user groups from the current community?
- New communities / countries / regions?

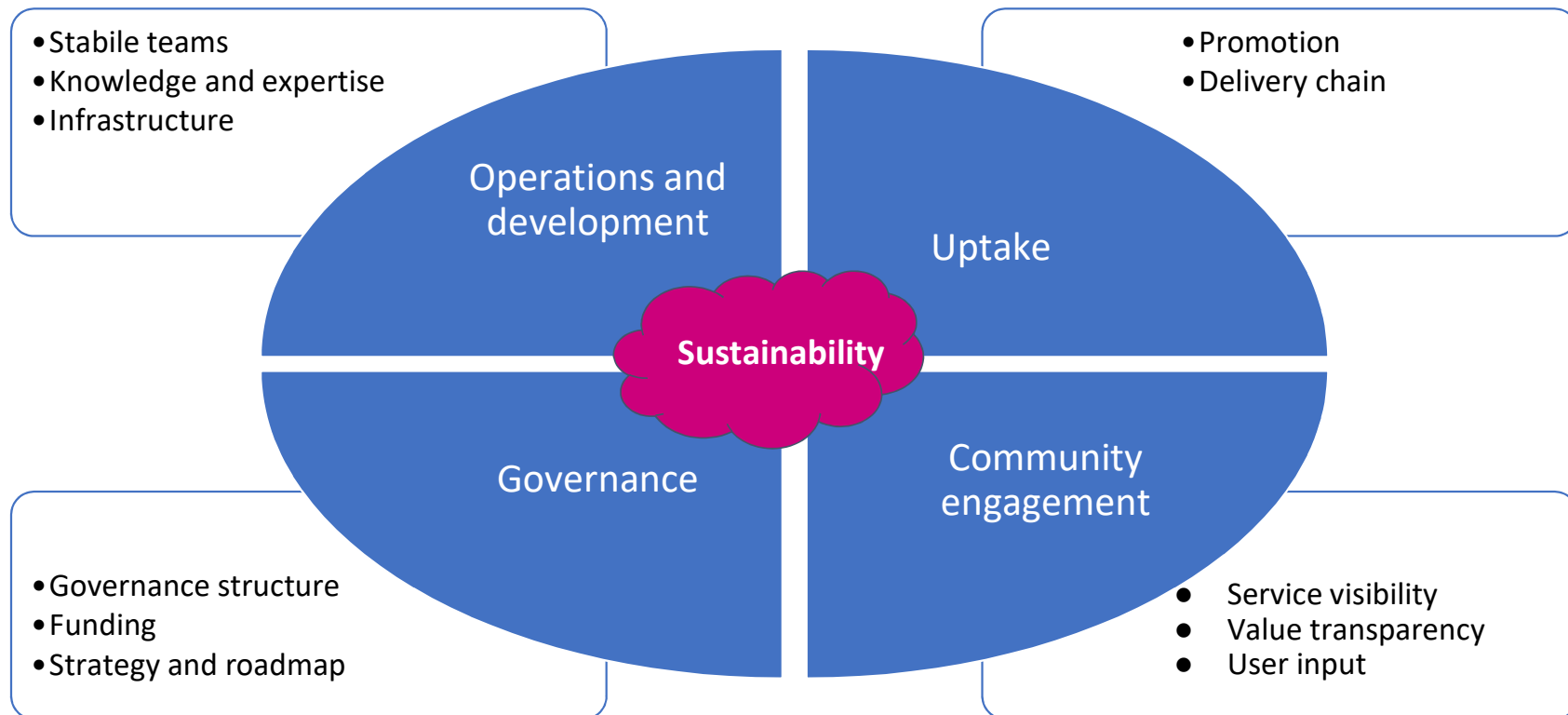
- What do we need...
 - What do we need more of?
 - What do we need but currently do not have?

3. Service Delivery Chain (SDC)

What should be **improved** and how?

- Are all elements of the SDC in place?
- Do we have a direct delivery from our service team to the user?
- Does it work?
- Do we have a hierarchical delivery chain?
- Does the hierarchical delivery chain work?
- Do all the links and all the nodes: know their role, do their role well, collaborate together?

4. How to Ensure Service Sustainability?



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