

# Distributed Infrastructure on Population Health (DIPoH) Business Plan : the finances



Assembly of Members, November 13<sup>th</sup> 2019  
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## About this presentation...

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What you can expect from us today:

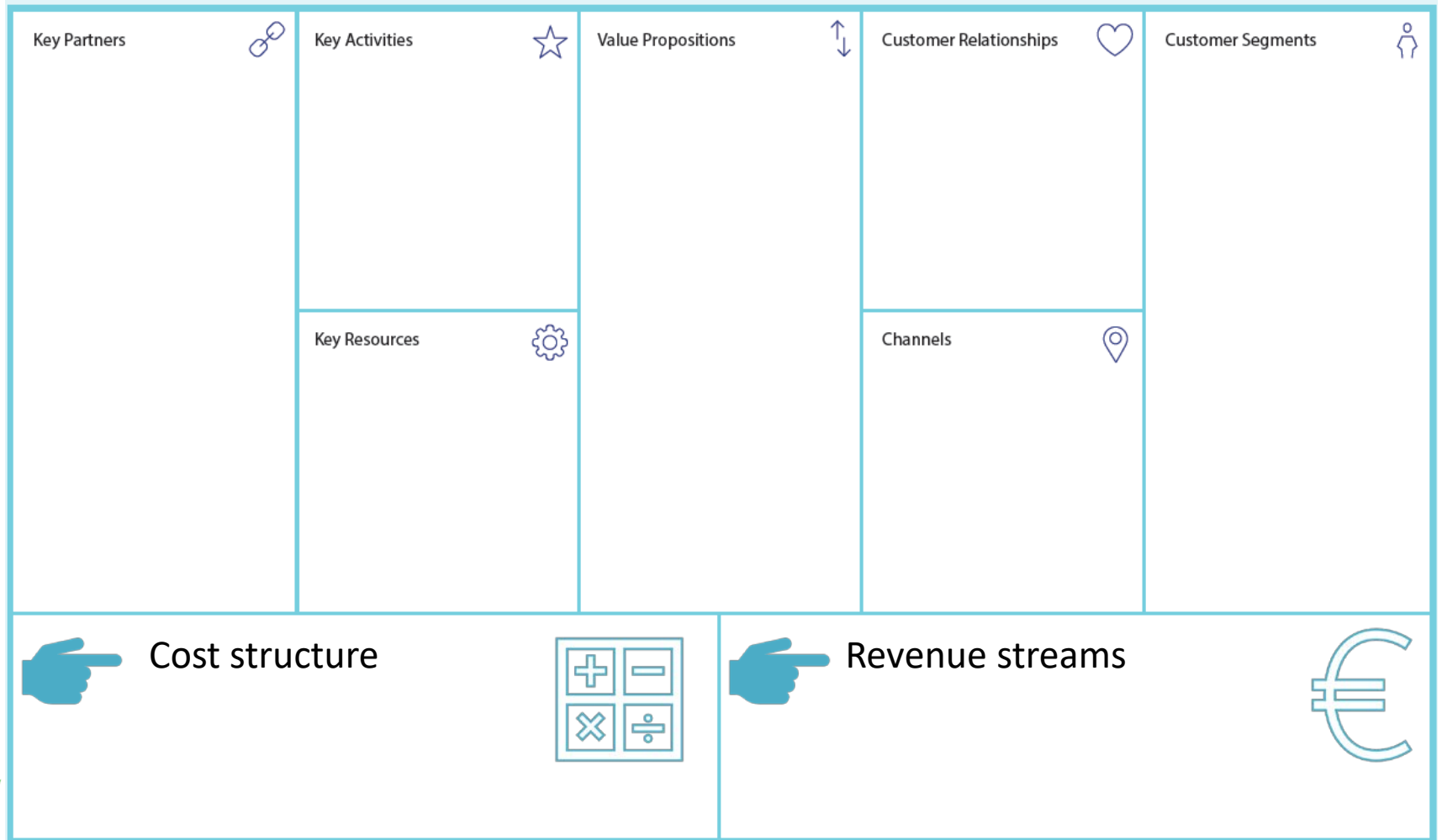
Options & models for creating a financially healthy infrastructure

What we cannot offer today:

Definite figures, detailed financial plan

-> we are still developing our structure

# Business plan: the finances



# Business plan: the finances

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Executive summary

Key points

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2.1 Project Governance

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3.2 Sensitivity Analysis

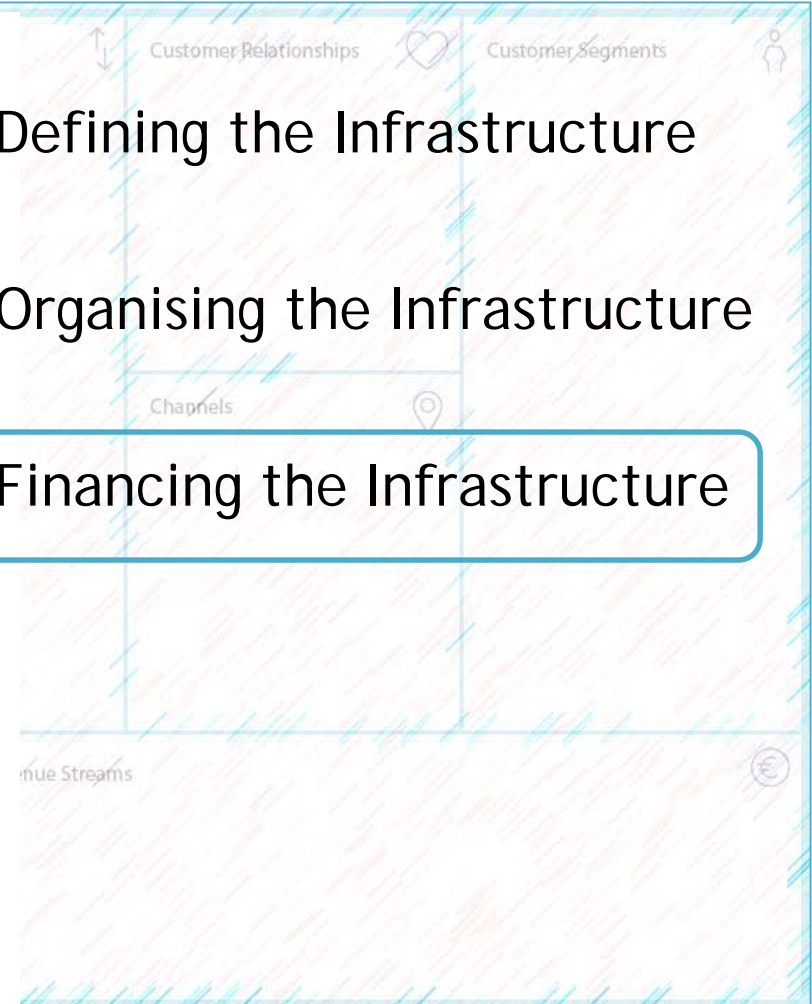
Literature

Annex 1: Strengths and weaknesses of Research Infrastructure alternatives

Annex 2: Research Networks: criteria and proof of concept

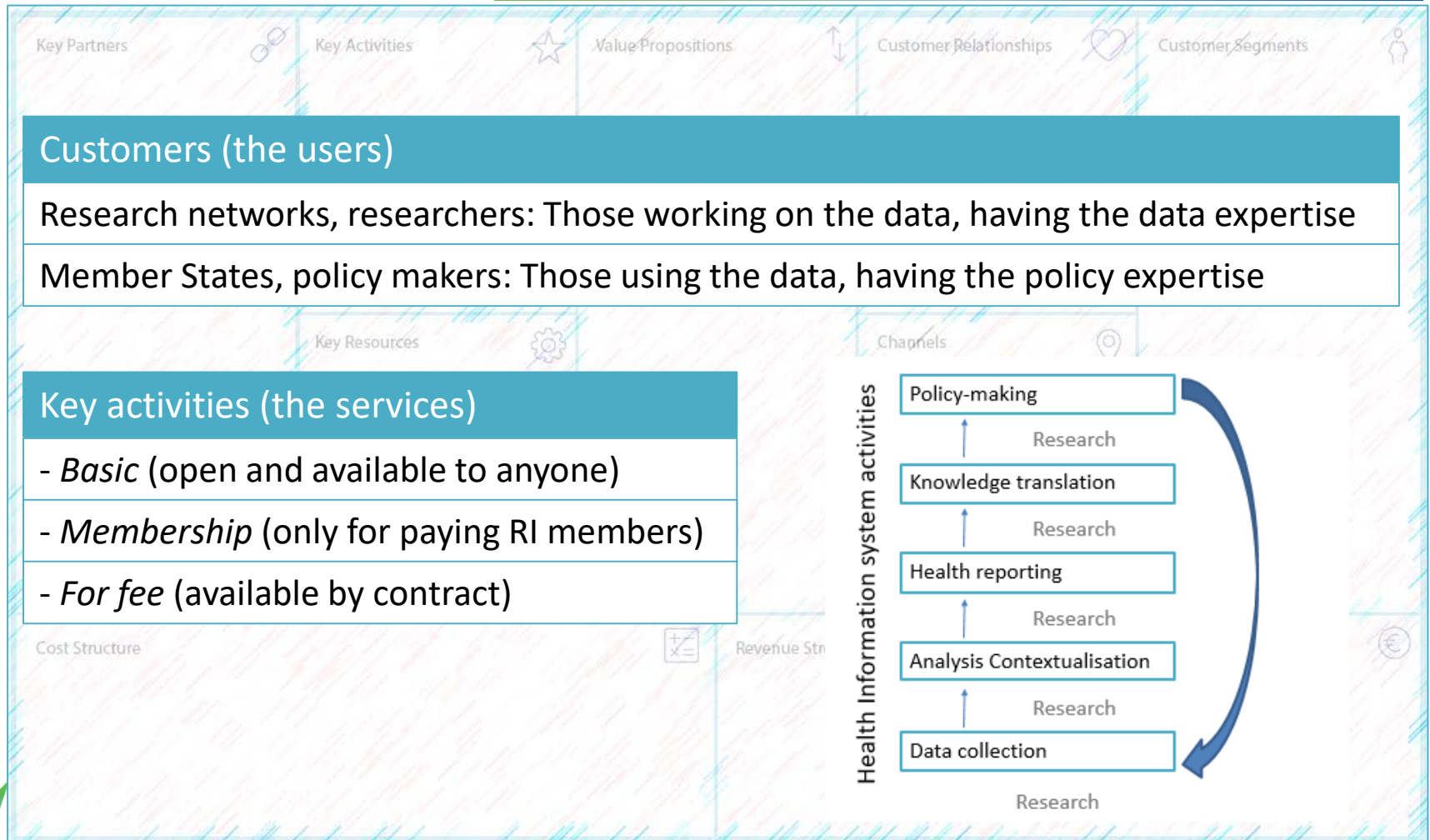
Annex 3: Detailed financial analysis

1. Defining the Infrastructure
2. Organising the Infrastructure
3. Financing the Infrastructure



Business plan

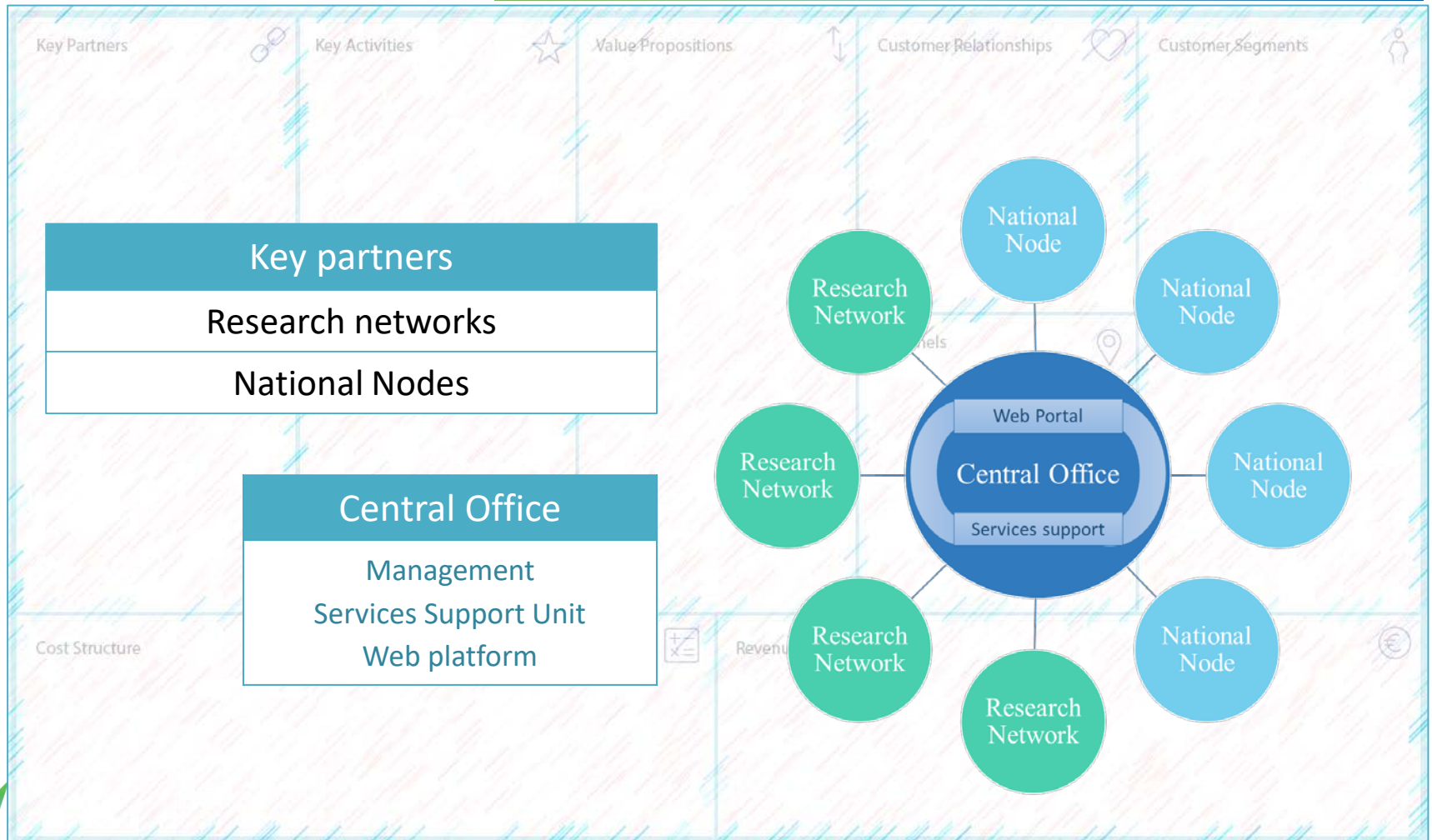
# Recalling: users and services



Business plan: 1. Defining the Infrastructure

*Recalling:*

# Central Office, Research Networks & National Nodes

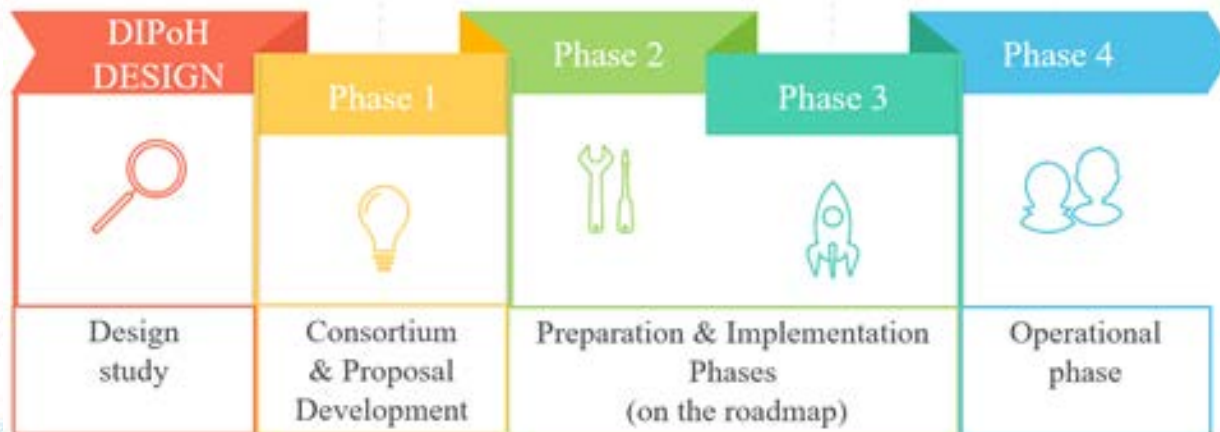




# Costs vs revenues

Estimating expenses & Identifying funding options...

...throughout the different phases



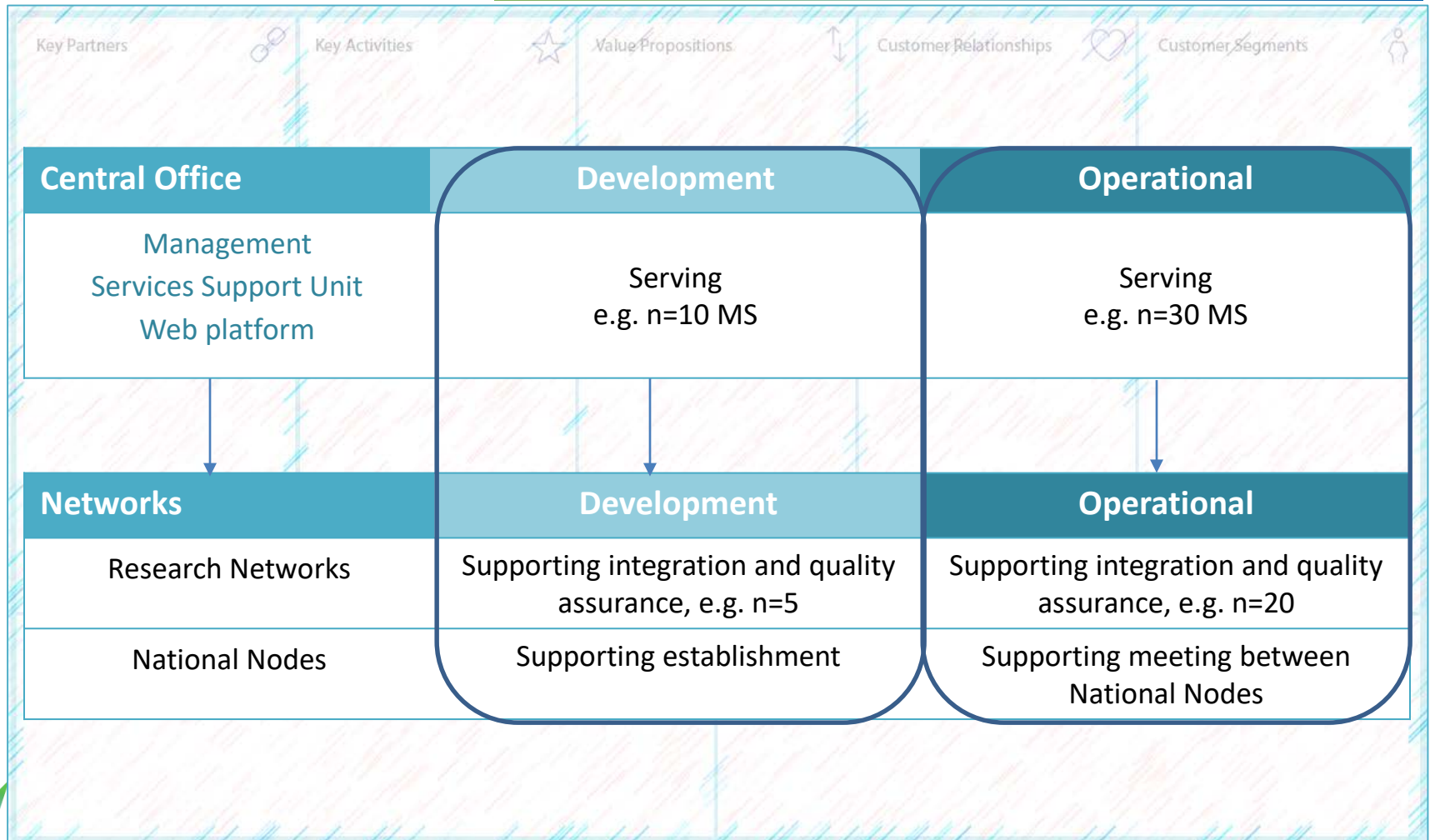
Cost Structure

Revenue Streams

From developing, setting up....

...to maintaining, expanding, harvesting

# Cost/Expenses







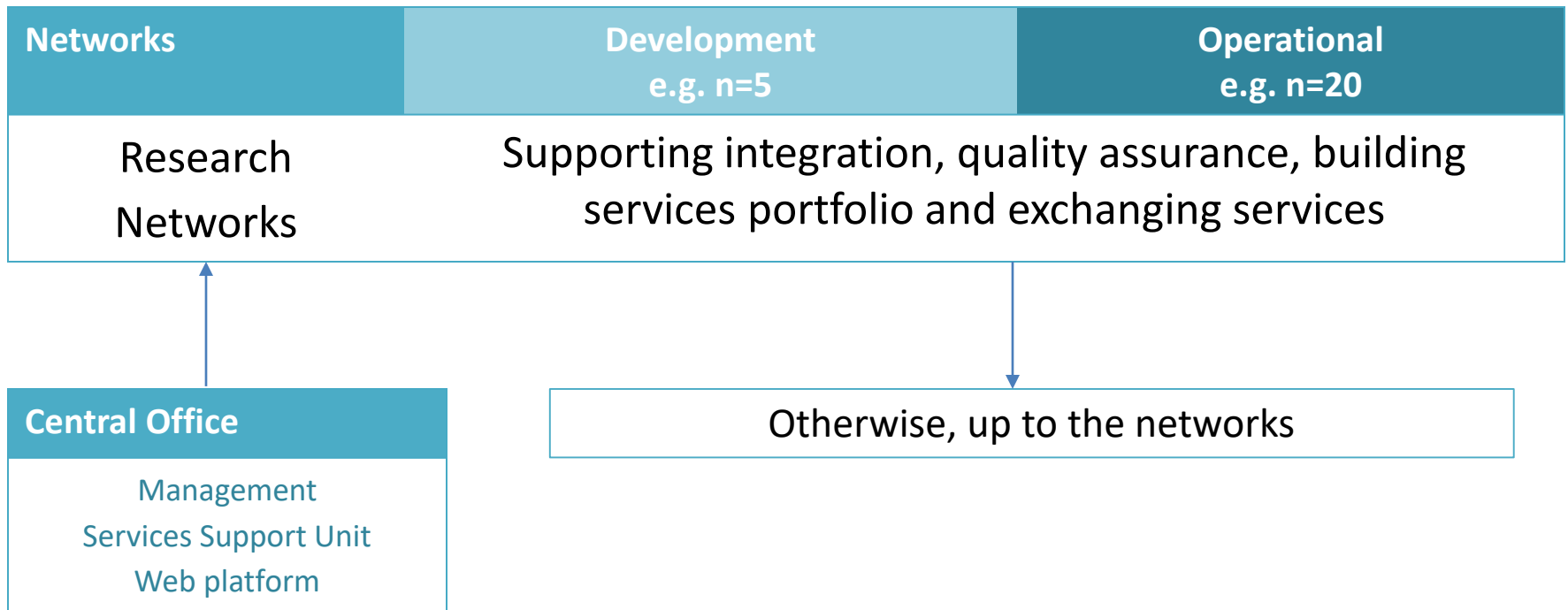
# Expenses: Central Office



| Central Office        | Development<br>Serving e.g. 10 MS<br>& 5 research networks                   | Operational<br>Serving e.g. 30 MS &<br>20 research networks | Activities   |
|-----------------------|--|---|--|
| Management            | HRM, Coordinator, Researcher, Communicator, etc.<br>Office, Travel, Meetings |   | Manage RI governance and control; Provide administrative support; Prepare & support committee meetings; Develop Strategy; Evaluate functioning; Advocate; Organise RI communication/PR;          |
| Web platform          | ICT professional, Editor, Data handler, etc.<br>Hardware, Software           |   | Handle web-data; Host website; Manage servers, software, updating; Develop & maintain repository; Set up communities, webinars, etc.; Implement RI services, in liaison with Services support    |
| Services Support Unit | Data Protection Officer, Legal Adviser, Controller, etc.<br>Open Access      |   | Manage, support and evaluate the services that the RI is offering (open access, to members and by contract), in liaison with <i>Web platform</i> ; Liaise with stakeholders; Knowledge brokering |
| Total/yr              | 1-2 M  |   |  |

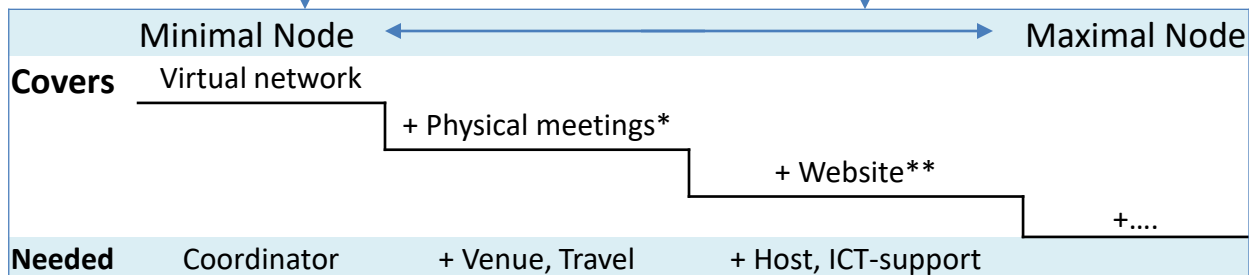


# Expenses: Research Networks





# Expenses: National Nodes



\*cost depending on number of participants, meeting frequency  
 \*\*cost depending on current infrastructure, type of information recorded and maintained



# Funding: Grants

**Grants**

Grant **Design Studies INFRADEV-01-2019-2020**

Types of action: Research and Innovation action | Programme: Horizon 2020

**Horizon 2020 support for the ESFRI Roadmap**

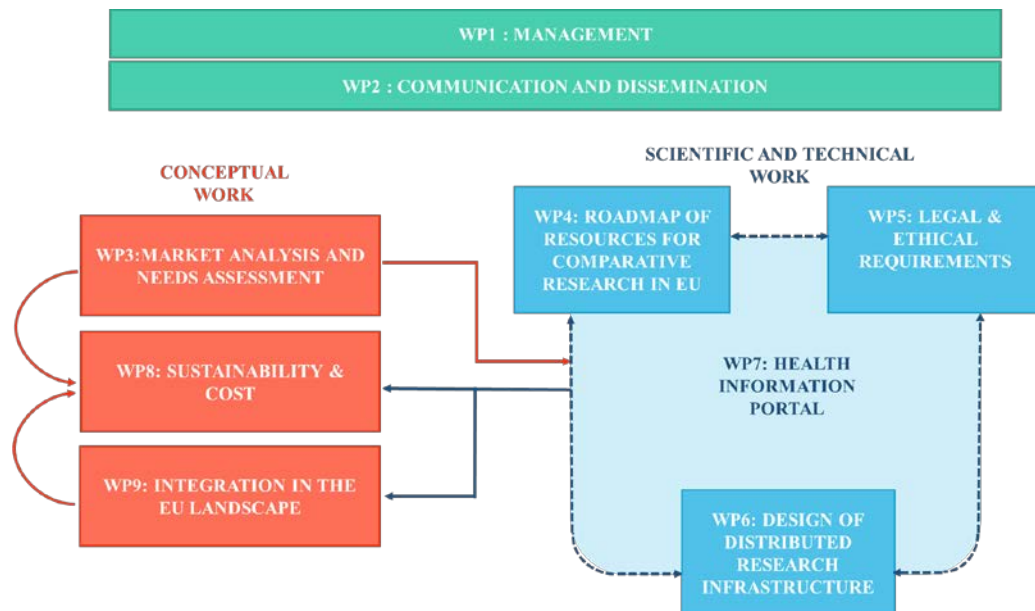
**A Coherent Toolbox of Activities**

EU Structural Funds & National Funding

Concept Preparation Implementation Operation

European Research Infrastructures: from WP 2020 calls to Horizon Europe

DIPoH proposal submitted under Horizon 2020



| PROGRAM | CALL                     | FUNDING SCHEME | PROPOSAL ID | ACRONYM      | STATUS    | REMAINING TIME | CLOSURE DATE (Brussels time) | ACTIONS |
|---------|--------------------------|----------------|-------------|--------------|-----------|----------------|------------------------------|---------|
| H2020   | H2020-INFRADEV-2018-2020 | RIA            | 951757      | DIPoH Design | Submitted | 0              | 12-11-2019 17:00:00          | Actions |



## Funding: Memberships

| MS contribution (annual)  | Examples (k€) |     |
|---|---------------|-----|
| Various possibilities   | CZ            | DE  |
| 1. Flat rate = equal contribution                                       | 100           | 100 |
| 2. Fixed fee + variable fee based on GDP                                | 40            | 285 |
| 3. Fixed fee + variable fee based on GDP per capita                     | 60            | 110 |
| 4. Fixed fee + variable fee based on GDP (50%) and GDP per capita (50%) | 50            | 195 |
| 5. Fee based on GDP only  | 20            | 350 |
| 6. Fee based on GDP per capita only                                     | 48            | 115 |
| 7. Fee based GDP (50%) and on GDP per capita (50%)                      | 35            | 230 |

| Access fees/Institutional contribution |                    |                  |
|--|--------------------|------------------|
| Organisation<br>(consider size)        | Annual fee<br>(k€) | In-kind<br>(fte) |
| Public Health Institutes               |                    |                  |
| Research Networks                      |                    |                  |
| Academia                               |                    |                  |



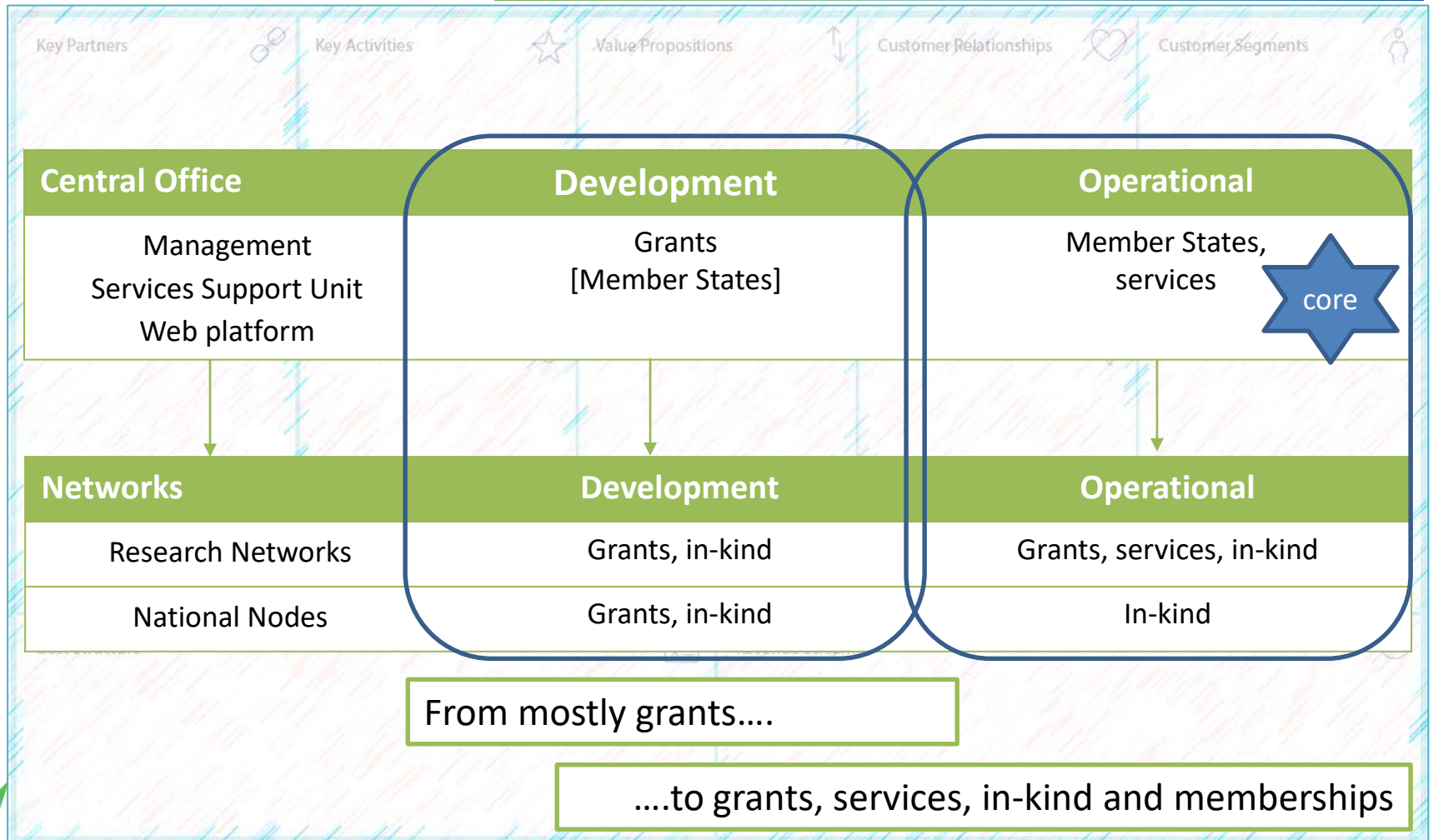
## Funding: Fee for service

| Pillar   | Fee for service (example)  |
|--|--|
| One stop shop (one entry point to the RI services) | Provide tailored literature searches, provide specific experts (knowledge brokering)                   |
| Innovative research                                | Provide Computing services   |
| Capacity building                                  | Provide training on requested topics; Develop and disseminate module on comparative health information |
| Knowledge translation research                     | Commission a full expert group; Commission a specific report, systematic review or data analysis       |

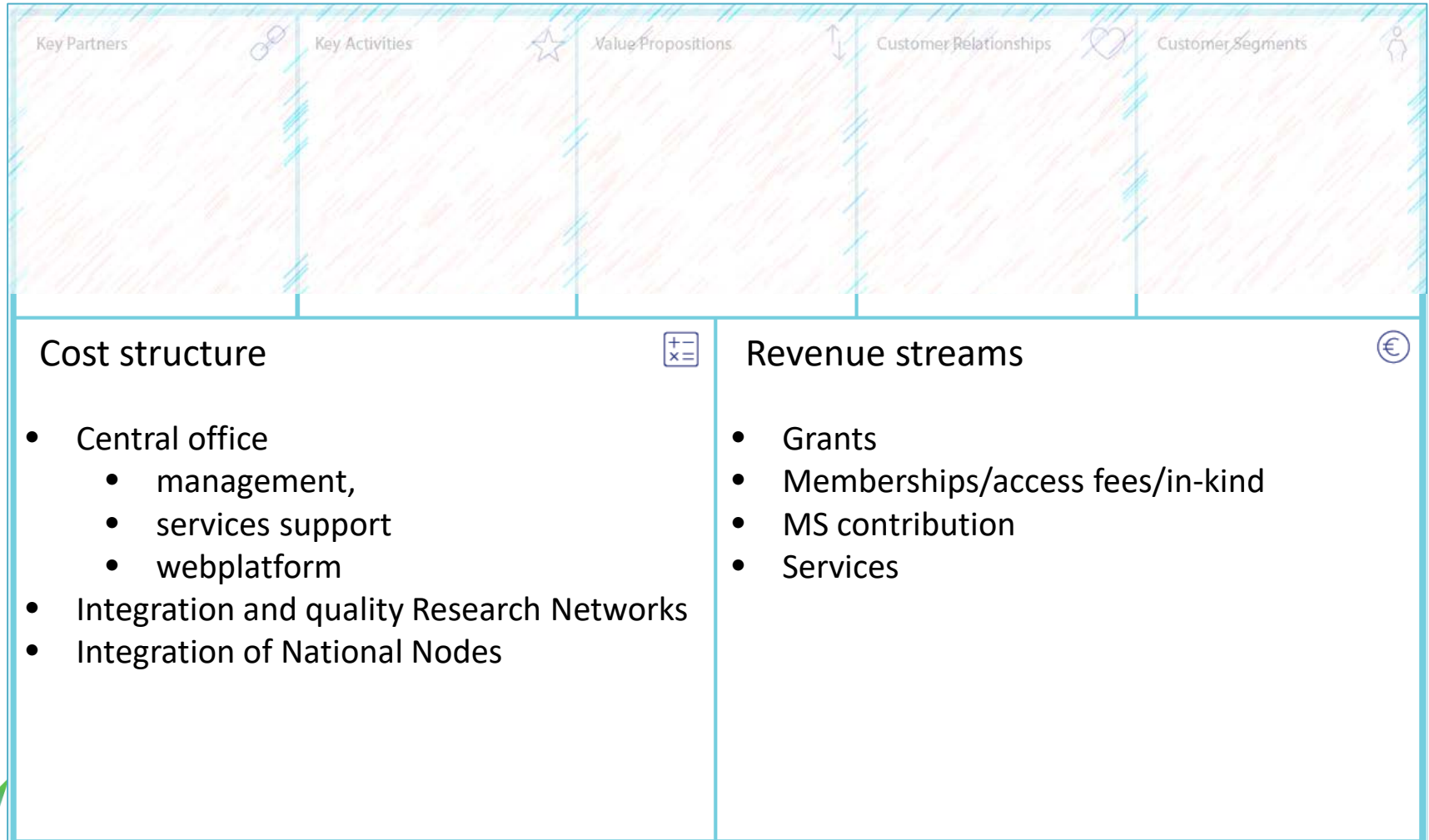




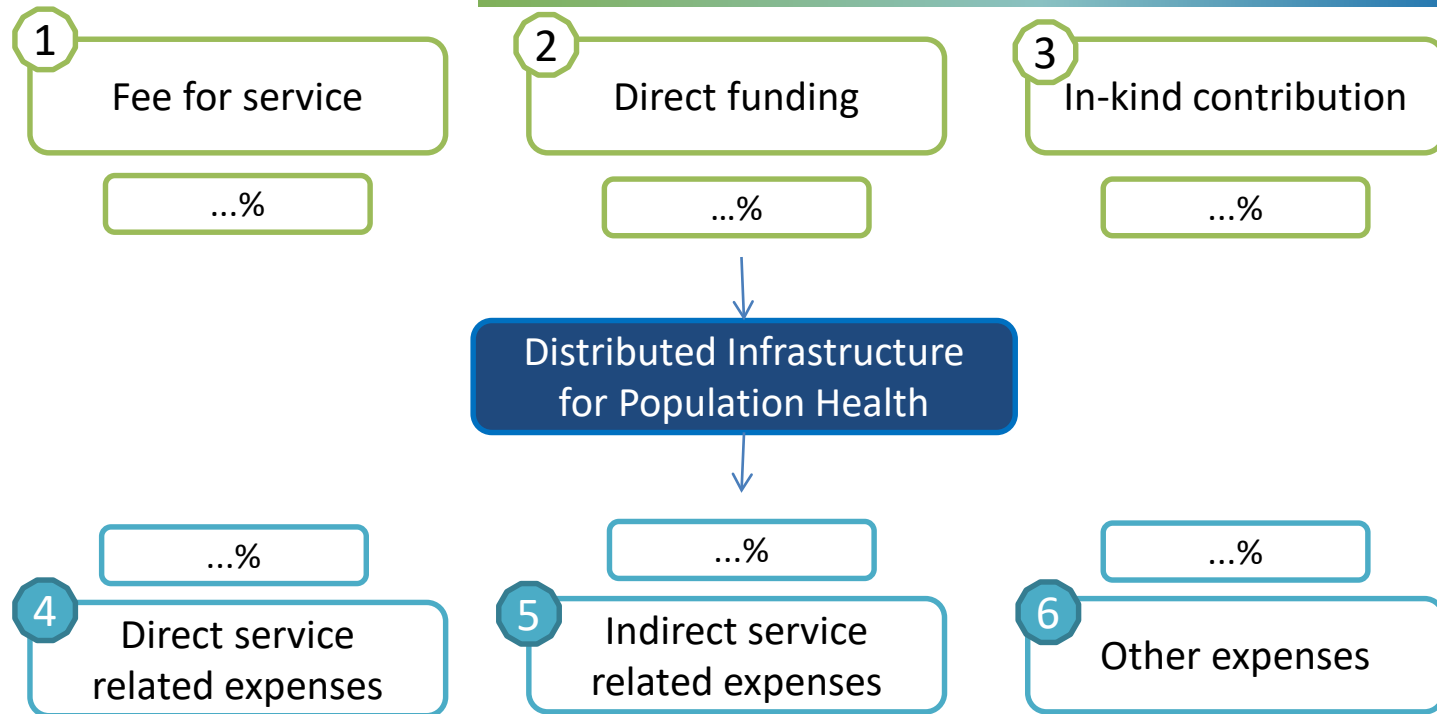
# Funding



# Costs vs revenues, summing up



# Costs vs revenues, summary



- 1 • Generated by users paying for services offered on or via the platform
- 2 • MS, EC, for connecting and representing stakeholders, offering certain shared services
- 3 • FTE

- 4 • Connected to offering services and related activities
- 5 • Not directly related to the provided services, cover strategic and tactical activities
- 6 • Include participation fees to connect with networks and unforeseen expenses

## Concluding

- What we have to offer
  - A group of dedicated people
  - A good cause
  - A developing infrastructure
- What we ask of you
  - Please reflect on possible ways you may contribute



# Additional slides

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National Institute for Public Health  
and the Environment  
*Ministry of Health, Welfare and Sport*

# Overview

## ANNEX 1: Overview of Research Infrastructure on health information inputs, outputs and outcomes

| INPUTS/ASSETS  | OUTPUTS/ACTIVITIES   | OUTCOMES/IMPACT  |
|--|--|--|
| <i>What we invest and have available</i>   | <i>What we do and who we reach</i>   | <i>What is our mid-term impact?</i>  |
| <p><b>Building blocks for a strong organization</b><br/>Governance, experience, commitment</p> <p><b>Our special assets</b><br/>Experts, good practices, networks</p> <p><b>Experience with project &amp; network development</b><br/>Senior investigators &amp; project developers</p> <p><b>Output and experience from previous research</b><br/>Good practices, tools, methods, evidence</p> <p><b>National nodes for health information</b><br/>Direct access to national experience</p> | <p><b>Provide services to our research networks</b><br/>Build and expand platform functionalities<br/>Support data management and exchange<br/>Support cross-national capacity building<br/>Support data quality maintenance<br/>Support project development and fundraising</p> <p><b>Provide services to a wider audience</b><br/>Build and maintain a portal for health information<br/>Assess national health information systems</p>  | <p>A growing set of participating research networks</p> <p>More comparable data for research</p> <p>More equal national research capacities</p> <p>More effective use of existing data</p> <p>Contribution to the European research agenda</p> <p>More efficient use of research funds</p> <p>Improved knowledge transfer</p> <p>Better data and indicators for health policies</p>                          |
| <i>Our ambitions and values</i>  | <i>How we work on impact and future strength</i>   | <i>What is our long-term impact?</i>   |
| <p>Be a reliable and desirable research partner</p> <p>We believe in European research collaboration</p> <p>Work closely together with stakeholders and citizens</p> <p>Aim for equity, sustainability, quality, efficiency</p> <p>Aim for FAIR data</p> <p>Better health and care is our core business</p> <p>We work for the public good</p>   | <p><b>Liaise, communicate, teach and advocate</b><br/>Liaise with stakeholders and decision makers<br/>Liaise &amp; coordinate with other RI's and ERIC's<br/>Collect &amp; distribute information and news<br/>Organize our advocacy and communication<br/>Organize conferences, meetings and for a</p> <p><b>Develop and implement knowledge brokering</b><br/>Reach out to NGO's, citizens and private parties</p> <p><b>Enlarge our conglomerate of distributed research networks</b><br/>Identify and support new partner networks</p> <p><b>Expand our research focus and potential impact</b><br/>Support knowledge translation research<br/>Foster foresight studies<br/>Support cost-effectiveness research<br/>Support horizon scanning and priority setting</p> | <p>A strong EU health research infrastructure</p> <p>Full grasp of population health, its determinants and trends</p> <p>Understanding EU health system dynamics</p> <p>Efficient European healthcare systems</p> <p>Mature national health information systems</p> <p>Leading comparative population health research</p> <p>Better EU health and well-being</p> <p>Health is wealth: stronger economies</p> |



# From InfAct to RI

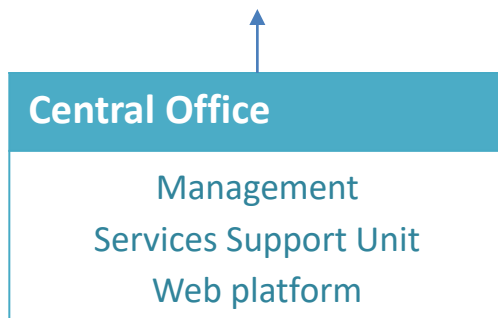
|   |  |
|---|--|
| 1 | One-stop shop for EU health information research<br>Find the data, report, network, guidelines or tool you are looking for       |
| 2 | Innovative research in health information<br>Use the best to know and use the latest developments and technologies               |
| 3 | Capacity building in health information<br>Get expert support and training on collection, analysis, reporting and transformation |
| 4 | Knowledge translation research for evidence based decision-making<br>Answer your (health) problem and based on proven evidence   |

| Level                             | Tangible contributions  |
|-----------------------------------|---|
| 1. One-stop shop:<br><br>find     | <ul style="list-style-type: none"> <li>*prototype for web platform</li> <li>*input and prototype for a (meta)database of research networks/projects collecting EU comparable data/information</li> <li>*overview of interoperability do's and don'ts when sharing, linking and managing health data across borders</li> <li>*standards for reporting meta-data</li> <li>*toolkit to produce BoD estimates: how to conduct a BoD study with minimum requirements in MS by collaborations and exchange of best practices</li> <li>*guidance to estimate health indicators using linked data and advanced statistics</li> <li>*guidance for high quality and target specific health reporting</li> </ul> |
| 2. Innovation                     | <ul style="list-style-type: none"> <li>*roadmap for further development of EU-HIS in terms of linked data and advanced statistics</li> <li>*use of Machine Learning Techniques to estimate health outcome indicators using linked data</li> <li>*proof of concept for federated data infrastructure compliant with the legal, semantic, operational and technical pillars of interoperability, allowing reproducibility and scalability</li> </ul>  |
| 3. Capacity building              | <ul style="list-style-type: none"> <li>*health system performance expert workshop</li> <li>*research network meetings (Peristat, EHLEIS, BoD)</li> </ul>  |
| 4. Knowledge translation research | <ul style="list-style-type: none"> <li>*working with health data cross-border and looking at it through the scope of interoperability layers add to policy uptake and benefits evidence-informed decision-making</li> <li>*high quality health reporting facilitates health information accessibility and thus supports evidence-informed decision-making in health</li> </ul>  |
| Overarching                       | <ul style="list-style-type: none"> <li>*concept business plan</li> <li>*committed MS</li> <li>*engaged research networks</li> </ul>   |



# Example Research Network: EHES

| <b>Cost of Coordinating Centre over a period of 5 years</b> |  | MS<br>n=5 | MS<br>n=16-20 | MS<br>n=28 |
|---|--|-----------|---------------|------------|
| Staff   | Coordinator, IT-expert, Statistician (reporting, sampling),<br>Epidemiologist, Lab person, Assistant |           |               |            |
|   | Overhead   |           |               |            |
|   | <b>Total</b>   | 2.5M      | 4.1M          | 5.5M       |
| Operational   | Training seminar (planning, fieldwork, reporting)  |           |               |            |
|   | Lab materials  |           |               |            |
|   | Overhead   |           |               |            |
| Travel  | Visits (site, consultation)  |           |               |            |
|   | Overhead   |           |               |            |
|   | <b>Total</b>   | 50k       | 75k           | 140k       |
| Total   | 5-year cost of Coordinating Centre   | 2.7M      | 4.5M          | 6.2M       |
|   | Annual cost of Coordinating Centre   | 540 k     | 900 k         | 1.25M      |





# Example National Node Process Netherlands

|                         |  |
|-------------------------|--|
| <b>RIVM (Organiser)</b> | Dutch National Institute for Public Health and the Environment |
| CBS                     | Statistics Netherlands   |
| Erasmus MC              | Erasmus Medical Centre, Department of Public Health            |
| Health RI               | Health Research Infrastructure Initiative                      |
| Nictiz                  | National ICT Institute in Care                                 |
| Nivel                   | Netherlands Institute for Health Services Research             |
| OCW                     | Dutch Ministry of Education, Culture and Science               |
| Trimbos-instituut       | Netherlands Institute of Mental Health and Addiction           |
| VWS (Chair)             | Dutch Ministry of Public Health, Welfare and Sport             |
| ZonMw                   | Netherlands Organisation for Health Research and Development   |

-> First: proof of concept; Then: discussion & assignment

Two examples:



Sustainable data  
delivery to OECD

Global status report  
on health data systems  
and capacity

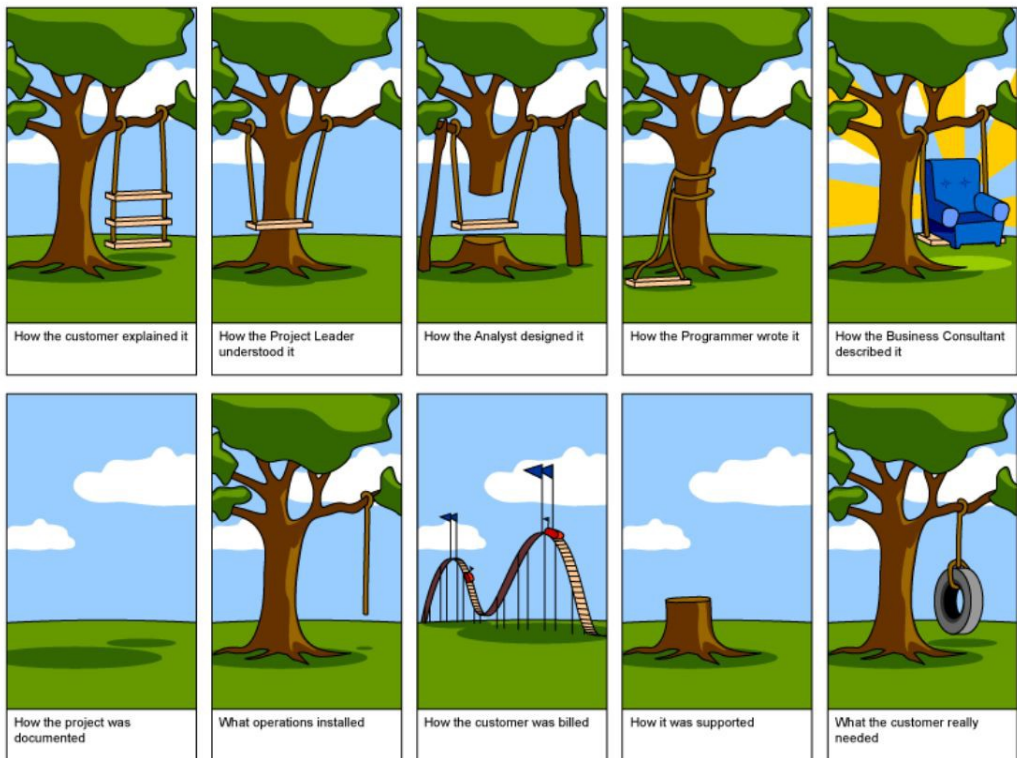
**SCORE**  
for Netherlands



BEHAT - NOT FOR CIRCULATION

World Health Organization

<http://www.projectcartoon.com/create/>

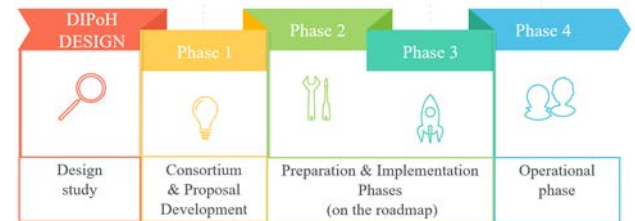
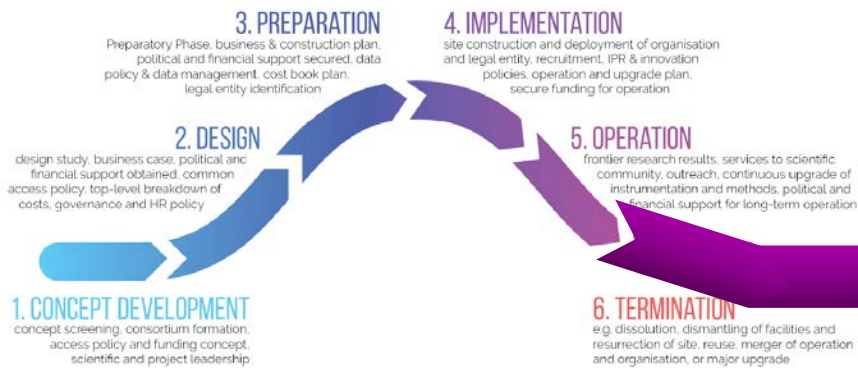
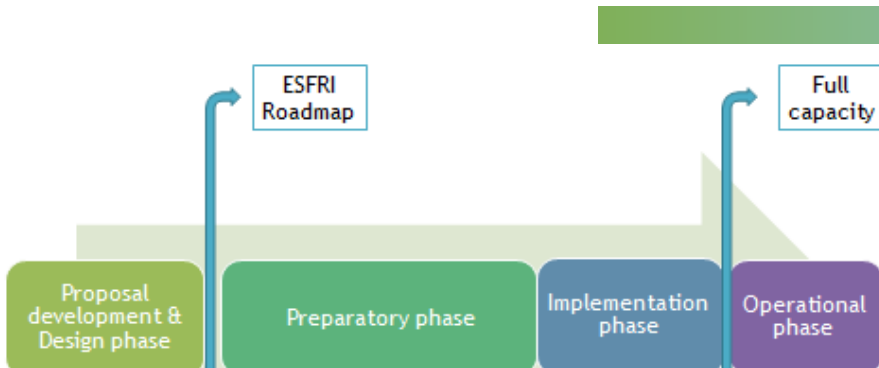


# WP7: Netherlands National Node

National Node meeting scheduled for November 5<sup>th</sup>  
(all invited accepted)

|                         |   |
|-------------------------|---|
| <b>RIVM (Organiser)</b> | Dutch National Institute for Public Health and the Environment  |
| CBS                     | Statistics Netherlands  |
| Erasmus MC              | Erasmus Medical Centre, Department of Public Health   |
| Health RI               | Health Research Infrastructure Initiative → Health RI is a joint initiative of DTL (Dutch Techcentre for Lifesciences), |
| Nictiz                  | National ICT Institute in Care  |
| Nivel                   | Netherlands Institute for Health Services Research  |
| OCW                     | Dutch Ministry of Education, Culture and Science  |
| Trimbos-instituut       | Netherlands Institute of Mental Health and Addiction  |
| VWS (Chair)             | Dutch Ministry of Public Health, Welfare and Sport  |
| ZonMw                   | Netherlands Organisation for Health Research and Development  |

- > Covering
- health domain from prevention to care
- both research and policy



**FULL SERVICE**

