

SPHN at a Glance

The Swiss Personalized Health Network (SPHN) is a national initiative designed to promote the development of personalized medicine and personalized health in Switzerland. SPHN will lay the foundations that are needed to facilitate research projects in this area such as a system for a nationwide exchange of health-related data. The ultimate goal is to prevent, diagnose and treat unfavourable health conditions more precisely, thus reducing the risk of developing such conditions and permitting more effective treatments of disease states with fewer adverse effects.

The Swiss Academy of Medical Sciences (SAMS) was mandated 2016 by the State Secretariat for Education, Research, and Innovation (SERI) and by the Federal Office of Public Health (FOPH) to develop a Swiss Personalized Health Network (SPHN)¹. During the period 2017–2020, priority is given to the development of a nationally coordinated data infrastructure ensuring data interoperability of local and regional information systems with special emphasis on clinical data management systems enabling effective exchange of patient data (e.g. disease phenotypes). Subsequently, funding of research projects will become more and more important. In the long-term, public health and healthy citizen data will also be integrated. Overall, a national coordinated data infrastructure will optimize the use of health data for personalized health related research.

SPHN integrates relevant clinical and basic research institutions and research support organizations

The SPHN project organization involves partners at the national level, at the technical level, and at the institutional level (Figure 1). SAMS is the overarching body of the project.

The **National Steering Board (NSB)** is the highest governing body of SPHN and is responsible for the overall strategy, for maintaining regular contacts to the superordinate political authorities and for external communications in coordination with SAMS. It includes representatives from key institutions in Switzerland (e.g. University Hospitals, Universities, ETH-Domain, swissuniversities, FOPH, SNSF). The integration of representatives from additional institutions (e.g. private hospitals, health insurances, industry) is foreseen in the future. The members of the NSB are appointed by SAMS.

¹ See the report 'Implementation of the Swiss Personalized HealthNetwork (SPHN) Initiative' from November 2015.

The **Executive Board (EB)** is responsible for scientific and operative tasks and comprises experts from a variety of disciplines.

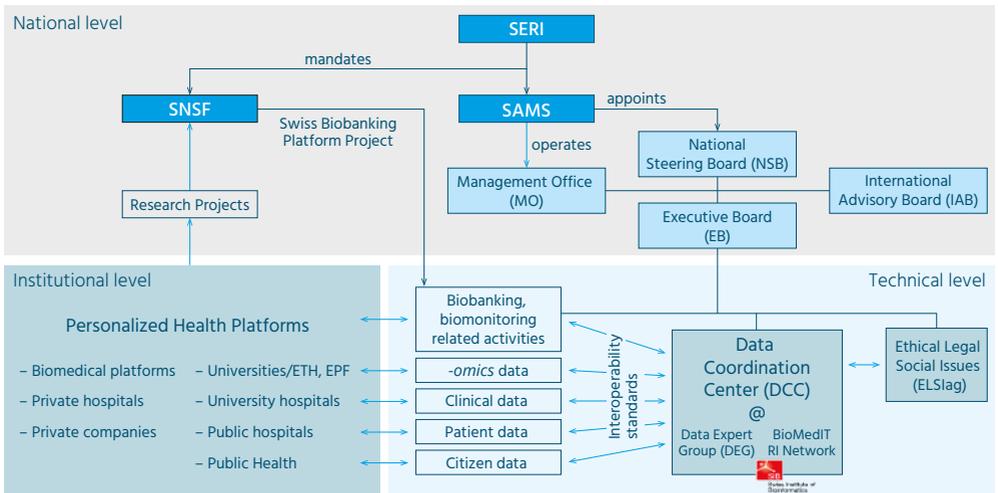
The **Data Expert Group (DEG)**, which is part of the Data Coordination Center (DCC) located at the SIB Swiss Institute of Bioinformatics, is responsible for defining standardized procedures for data production, data organization and data storage in order to reach nationwide interoperability of molecular and clinical patient data. It includes experts from all institutions involved in SPHN. The DEG has defined the infrastructures required to build a progressive and shareable data system that enables nationwide data interoperability.

The **ELSI advisory group (ELSIag)** addresses ethical, legal and social challenges that SPHN will face. It is composed of experts from various relevant fields such as bioethics, life sciences law, social sciences. It also includes representatives of SAMS, swissethics, and patient advocacy groups.

The **International Advisory Board (IAB)** is composed of international experts. The Board provides advice, expertise, and peer-review of funding proposals and of the initiative as a whole.

Finally, the **Management Office (MO)** is operated by SAMS and is in charge of the administrative and daily operation of the initiative such as preparation of the meetings of the various boards, controlling, budgeting and reporting.

Figure 1: SPHN organization chart



→ SPHN starts with public institutions (e.g. University Hospitals, Universities, ETH-Domain) and shall be extended later to private hospitals and private companies.

The legal and organizational framework is defined by the SERI-SAMS service contract

SAMS and SERI have signed a service contract for the period 2017–2020. SAMS is thus the legal entity responsible for the good governance of the SPHN initiative. The service contract together with the Rules of Procedure, the Funding Principles, and the Funding Regulations define the overall framework of the initiative.

On this basis, the Swiss Government has allocated a total of CHF 68 million to the SPHN initiative for the first period 2017–2020 of which 50 million are under the responsibility of the NSB and SAMS. The remainder is dedicated to the BioMedIT project which is under the responsibility of SIB. The matching funds principle applies to all financial contributions, i.e. the participating institutions must provide their own contributions (in cash and/or in kind) to match the funds provided by SPHN.

	Item	CHF	Description
1.	Management, bodies, symposia, workshops, etc	4.0 mio	Limit of expenses (Ausgabenplafond)
2.	Instruments (in order of priority) Infrastructure implementation projects Infrastructure development projects 'Driver' projects	46.0 mio	Total engagements (Verpflichtungskredit)
3.	BioMedIT	18.0 mio	Limit of expenses (Ausgabenplafond)

SPHN will fund the development of infrastructure via three instruments

Based on the Funding Principles and Funding Regulations, SPHN will support projects that fall into one of the following instruments.

Instrument	Description	Funding scheme
Infrastructure implementation projects	Projects that are devoted to build a progressive shareable data system enabling nationwide interoperability of molecular and clinical patient data.	Collaboration agreements (Leistungsvereinbarung)
Infrastructure development projects	Projects that thrive to develop and test new technologies, methods and infrastructures for personalized health related research in connection with infrastructure implementation.	Call for proposals
'Driver' projects	These projects are based in a concrete research field (e.g. oncology/ immunology) and will push the development of clinical data management systems in all University Hospitals by testing data interoperability & data sharing principles within the whole network.	Call for proposals

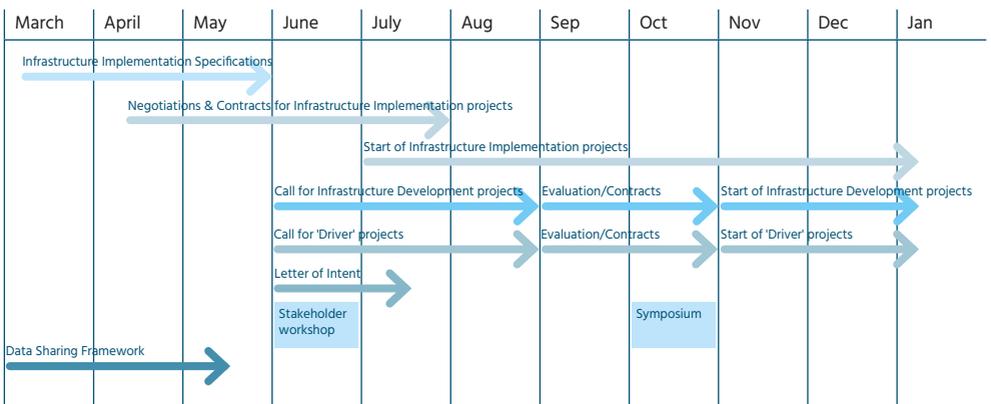
→ To take advantage of the entire ecosystem, coordinated calls are envisaged with the ETH-Domain SFA in personalized health and related technologies. The SNSF has no ear-marked funds for personalized health research, but supports projects through competitive calls across existing instruments.

Timeline 2017: service contracts in Spring, call for proposals in June

The beginning of 2017 was dedicated to the framing and final definitions of the administrative and legal preconditions. Until the beginning of Summer 2017, the data sharing framework and the specifications (e.g. definitions of milestones) of the service contracts for infrastructure implementation projects will be defined with University Hospitals/Universities.

The calls for proposals for infrastructure development projects and 'driver' projects will be announced in June 2017. The submission deadline for all project proposals is planned for 31 August. Start of projects funding is foreseen for November 2017 at the earliest.

Figure 2: Timeline 2017



→ The organization of a stakeholder workshop in June and of a scientific symposium in October/November are envisaged.

How to stay up to date?

Future communication about SPHN will be made using the following channels:

- The SAMS newsletters and website will relay information about the initiative as a whole.
- Information specific to the project will be communicated on the SPHN website (www.sphn.ch; available in April) and in the SPHN Newsletter 'Steps'.

Please note that the relevant documents mentioned in this factsheet (e. g. Funding Principles, Funding Regulations) are published on the SAMS website and on the upcoming SPHN website.