Brief summary of the 2016 Israel Roadmap of Research Infrastructures.

Following the 2013 roadmap, the VATAT advisory committee on RI has continued its work for additional 3 years. In the 2013 document we have defined the meaning of a central RI and selected projects in many fields of science, which were listed in the 2013 roadmap. Three of these projects were dealt with by VATAT so far:

- Israel membership in ESSurvey has been established.
- The Cloud Service Unit was implemented within the IUCC
- A professional committee, headed by Prof. Ciachanover, has deliberated the creation of a center for genetically modified mice, and has submitted an implementation recommendation.

New ideas for RI projects have been requested from all University VPs for Research, and were discussed by our subcommittees. Two new subcommittees were created in Environment and Humanitites. New projects have been added in many categories. In addition, the committee has decided to make the following general recommendations to VATAT:

- Establish a special research fund which will allocate funding to university research equipment machinery with price tags of order $1million or more.
- Create a team which will supervise the established RIs, and will be responsible for their sustainability and long-term policies.
- Formulate a policy for sustainability of RIs.
- Formulate a policy for the operation of environmental RIs, in particular the usage of research boats.

The **list of projects** included in the 2016 roadmap is the following:

Physics and Engineering:

- Joining ESO, the European Space Observatory.
- Establishing a center for atomic-resolution transmission electron microscopy.
- Establishing a center for cryogenic electron microscopy
- Creating a national laser center.

Biology and Medicine:

- Joining EU-Openscreen
- Joining EuroBioImaging
- Creating a center for genetically modified mice.
- Creating a center for plant phenomics
- Creating a center for genetically modified zebrafish.
- Creating an analytic center for glycosciences.

Energy

- Creating a center for hydrocarbon based alternative fuels
- Establishing a solar harvesting center

Environment

- Creating a national environment center for atmosphere and biosphere measurements.

Social Studies

- Enabling research usage of national statistical data
- Creating a national repository of social science data

Humanities

- Creating a center for digital humanities
- Creating a national Hebrew corpus

Appendix

Israel participation in International RIs:

Physics: CERN, ATLAS.

Biology: EMBL

Synchrotron Radiation Facilities: ESRF, SESAME

Computational Network: GEANT

Israel participation in ESFRI landmarks and projects:

Environment: EMBRC

Biology: INSTRUCT, ELIXIR

Computation: PRACE

Social Studies: SHARE, ESSurvey