

## Main Activities

### Capacity Building Program



#### Training Activities

Asi@Connect workshops and training programs support capacity building of NREN engineers and administrative staff.

#### Campus Network Design

Well-developed campus network infrastructure allows universities to connect to their National Research and Education Network (NREN) and to local Internet Exchange Points.

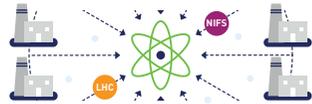
### Tele-medicine



Medical doctors and experts share experiences and knowledge for epidemic disease prevention & better public health service.

Asi@Connect provides high-quality network connectivity for supporting live surgery and tele-surgical training.

### e-Science



Researchers and institutions collaborate on a range of subjects in natural science: Particle Physics such as Large Hadron Collider (LHC), Nuclear Fusion Science (NIFS), computational lenses, and grid computing.

### Earth Observation



Asi@Connect underpins the real-time data exchange through computing systems for climate and weather prediction.

People in remote rural areas benefit from high resolution regional prediction systems which provide faster and more accurate forecasts.

### Advanced ICT Technology



Asi@Connect enables researchers and engineers to develop and deliver innovative network technologies such as future internet to make the network environment more reliable, compatible and sustainable.

## Asi@Connect Call for Proposals

Asi@Connect supports collaboration activities for the R&E community in Asia-Pacific region by 'Call for Proposals (CFPs)'



1 <sup>st</sup> call	2 <sup>nd</sup> call	3 <sup>rd</sup> call	investment	Participating
52 proposals submitted	64 proposals submitted	55 proposals submitted	over €7M	over 700 engineers
12 awarded	17 awarded	22 awarded		over 24 Asian countries

### TEIN\*Cooperation Center

Asi@Connect is managed by the regional networking organization TEIN\*Cooperation Center.

**Website:** [www.tein.asia](http://www.tein.asia)  
**Address:** A-708, DMC High-Tech Industrial Center, 330 Sungam-ro, Mapo-gu, 03920, Seoul, S.Korea  
**TEL:** +82-2-3153-7343  
**Email:** [General] [teincc@teincc.org](mailto:teincc@teincc.org) (CFP) [tech@teincc.org](mailto:tech@teincc.org)



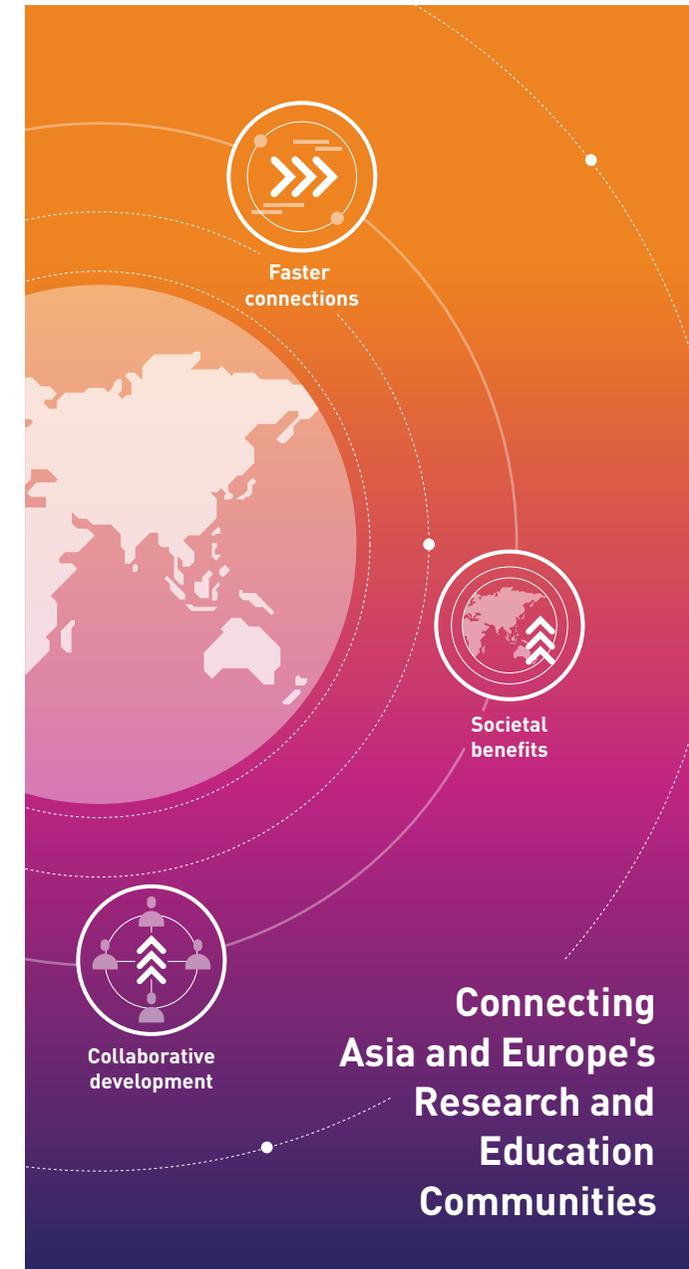
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The Korean Government, the Ministry of Science and ICT (MSIT), supports the operation and management costs of the TEIN\*Cooperation center.



Seoul Metropolitan City Government contributes to the TEIN\*Cooperation Center office and its facilities.



# What Is Asi@Connect?

The EU co-funded Asi@Connect project provides a dedicated regional high capacity and high quality internet network, Trans Eurasia Information Network (TEIN), for research and education (R&E) communities across Asia-Pacific and Europe, and leverages e-infrastructures developed for public service projects.



## Connecting partners faster

One of the most successful ASEM initiatives to support ICT infrastructures and R&E communities through more effective, faster and powerful dedicated internet connections across the Asia-Pacific and with Europe.



## Global societal benefits

TEIN supports applications with a high societal impact, such as tele-medicine, earth observation and agricultural research based on global cooperation.

Over the last 5 years, with the development of local network infrastructure and international interconnections, TEIN has more than doubled the traffic and bandwidth.



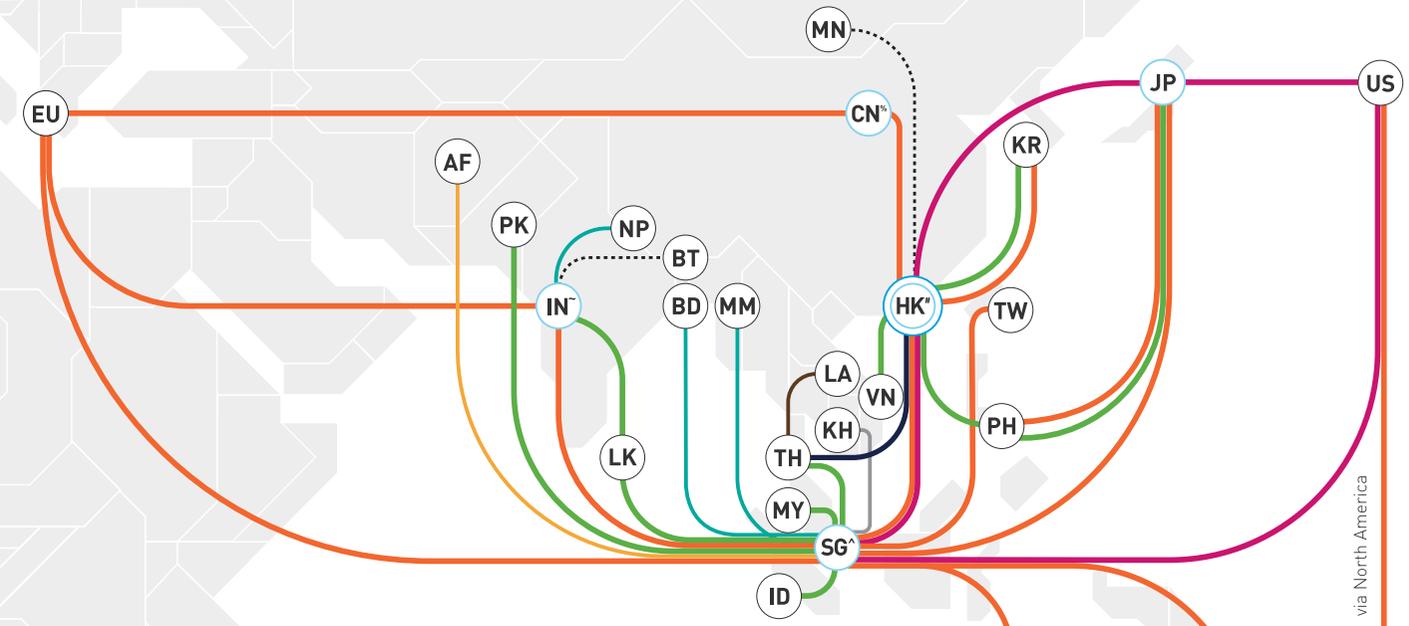
## Collaborative development

Students, academics and researchers benefit from extensive global collaboration opportunities through Asi@Connect programs, which foster knowledge sharing and capacity development.

# Our History

- 2001~06** **TEIN Initiative** Seoul and Paris
- 2004~08** **TEIN2** 09 Asian partners and Europe
- 2008~12** **TEIN3** 18 Asian partners and Europe
- 2012~16** **TEIN4** 23 Asian partners and Europe
- 2016~** **Asi@Connect** 24 Asian partners and Europe

# TEIN Map



## Asi@Connect Project Partners

- |   |  |
|---|--|
| <b>AF</b> • Afghanistan Research and Education Network (AfREN)  | <b>LA</b> • Laos Education and Research Network (LERNET)   |
| <b>AU</b> • Australia's Academic and Research Network (AARNET)  | <b>MY</b> • Malaysian Research and Education Network (MYREN)   |
| <b>BD</b> • University Grants Commission (BdREN)  | <b>MN</b> • Mongolian Research and Education Network (ErdemNet)  |
| <b>BT</b> • Department of Information Technology and Telecom (DrukREN)  | <b>MM</b> • University of Computer Studies Yangon (mmREN)  |
| <b>KH</b> • Institute of Technology of Cambodia (CamREN)  | <b>NP</b> • Nepal Research and Education Network (NREN)  |
| <b>CN</b> • China Education and Research Network (CERNET)<br>• % CERNET connected to TEIN CN PoP at 10 Gbps<br>• China Science and Technology Network (CSTNET)                                      | <b>NZ</b> • Research and Education Advanced Network New Zealand (REANNZ)   |
| <b>HK</b> • The Hong Kong Academic and Research Network (HARNET)<br>• The Hong Kong Open Exchange (HKOX)<br>• # HARNET and HKOX connected to TEIN HK PoP at 10 Gbps                                 | <b>PK</b> • Pakistan Education and Research Network (PERN)   |
| <b>IN</b> • National Knowledge Network (NKN)<br>• ~ NKN connected to TEIN IN PoP at 10 Gbps   | <b>PH</b> • Advanced Science and Technology Institute (ASTI)   |
| <b>ID</b> • Institut Teknologi Bandung (ITB)  | <b>SG</b> • Singapore Advanced Research & Education Network (SingAREN)<br>• ^ SingAREN connected to TEIN SG PoP at 10 Gbps |
| <b>JP</b> • Ministry of Agriculture, Forestry and Fisheries Research Network (MAFFIN)<br>• National Institute of Information and Communications (NICT)<br>• National Institute of Informatics (NII) | <b>LK</b> • Lanka Education and Research Network (LEARN)   |
| <b>KR</b> • National Information Society Agency (NIA)<br>• Korea Research Environment Open NETWORK (KREONET)  | <b>TW</b> • Academia Sinica Grid Computing (ASGC)  |
|   | <b>TH</b> • Thailand Research Education Network Association (ThaiREN)  |
|   | <b>VN</b> • National Agency for Science and Technology Information (NASATI)  |

\* As of December 2018. Ongoing updates

\*\* Other regions (Central Asia, Africa and Latin America) can be connected via global R&E networks such as EU(GÉANT) and US(Internet2)

<span style="color: red;">—</span> 100 Gbps	<span style="color: green;">—</span> 1 Gbps	<span style="color: teal;">—</span> 45 Mbps	<span style="border: 1px solid blue; border-radius: 50%; padding: 2px;">TEIN PoPs</span>
<span style="color: orange;">—</span> 10 Gbps	<span style="color: blue;">—</span> 622 Mbps	<span style="border: 1px solid grey; border-radius: 50%; padding: 2px;">10 Mbps</span>	<span style="border: 1px solid blue; border-radius: 50%; padding: 2px;">TEIN NOC</span>
<span style="color: purple;">—</span> 2.5 Gbps	<span style="color: yellow;">—</span> 155 Mbps	<span style="color: grey;">- - - - -</span> Planned	
<span style="color: darkblue;">—</span> 2 Gbps	<span style="color: brown;">—</span> 100 Mbps		