2 December 2018

Delivering international R&E: Contributions to global collaboration, innovation and transformation

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Overview

- **An overview of Jisc, the UK's national research and education network**
  - Strategy, structure and reach
  - Network and technology
  - Jisc, more than just a (Janet) network
  - Jisc pilot project launched October 2017
    - Trust and identity
    - Cybersecurity
- **Transnational education (TNE)**
  - TNE definitions
  - UK TNE data
  - TNE in the Middle East
  - Case Study: United Arab Emirates
  - Developing TNE support and services

Jisc strategy, structure and reach

Jisc is the UK **higher**, **further education** and **skills** sectors' **not-for-profit** organisation for **digital services** and **solutions**

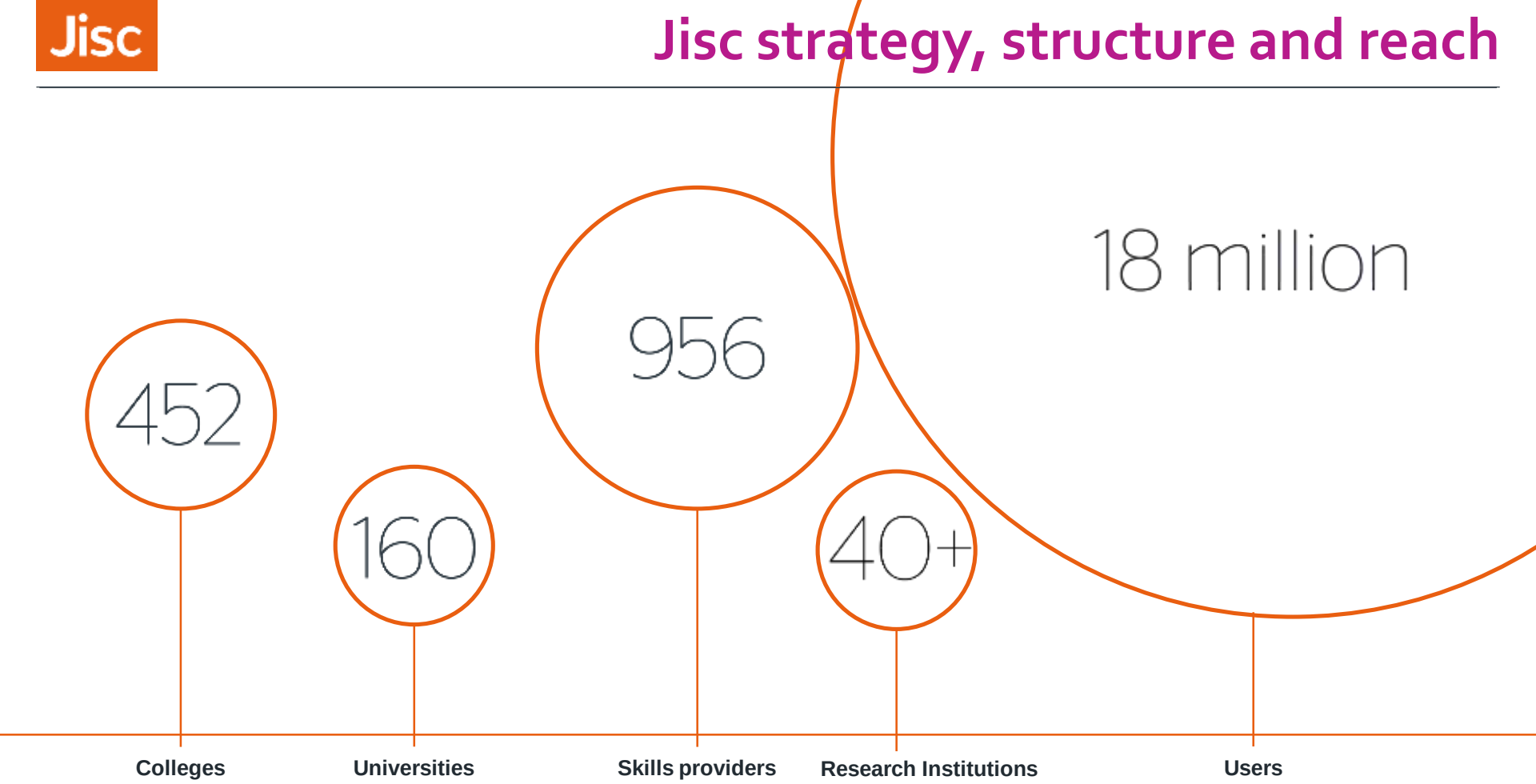
We…

Provide trusted **advice** and **practical assistance** for universities, colleges and learning providers

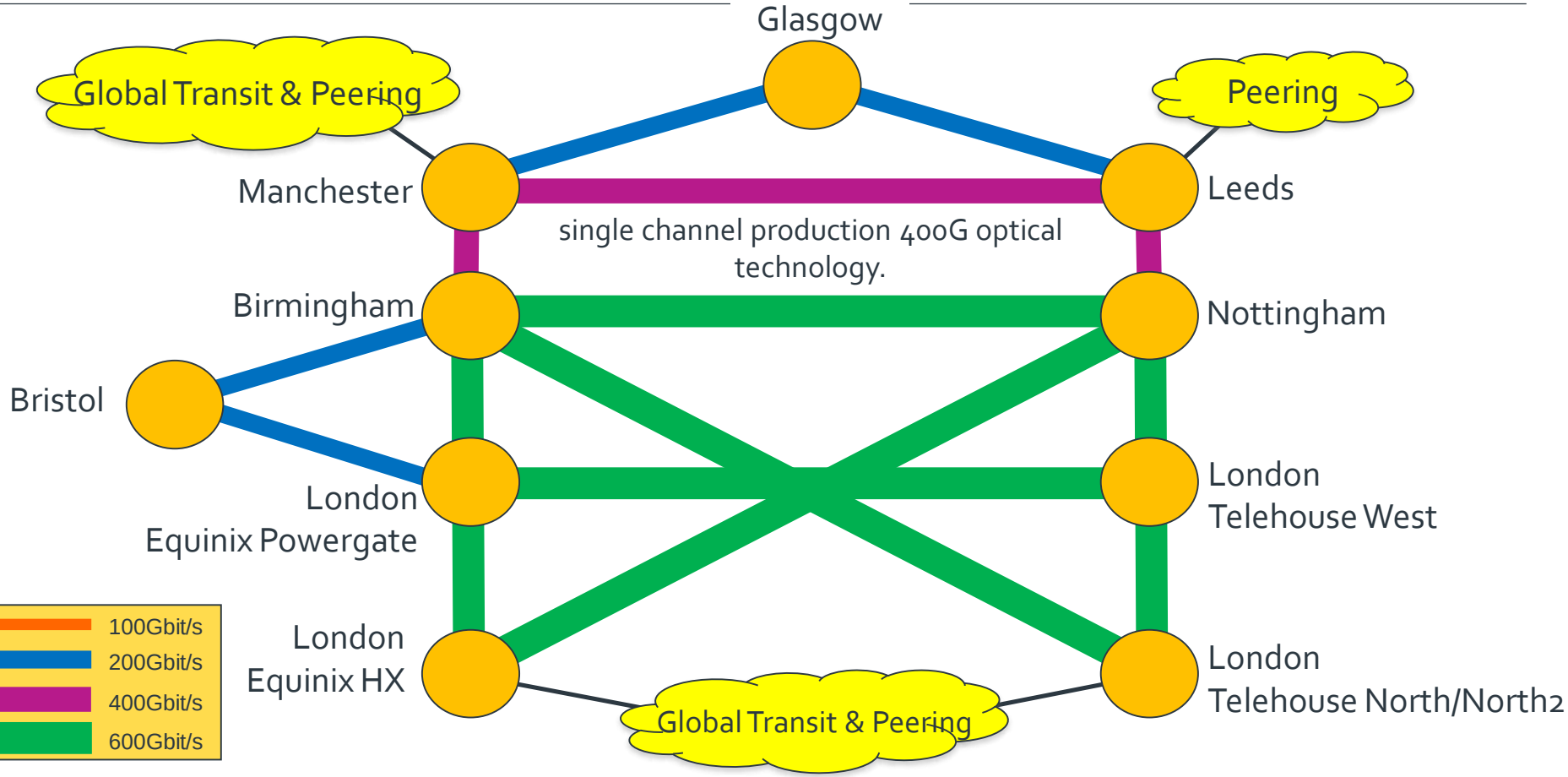
Operate **shared digital infrastructure** and **services**

Negotiate **sector-wide deals** with IT vendors and commercial publishers

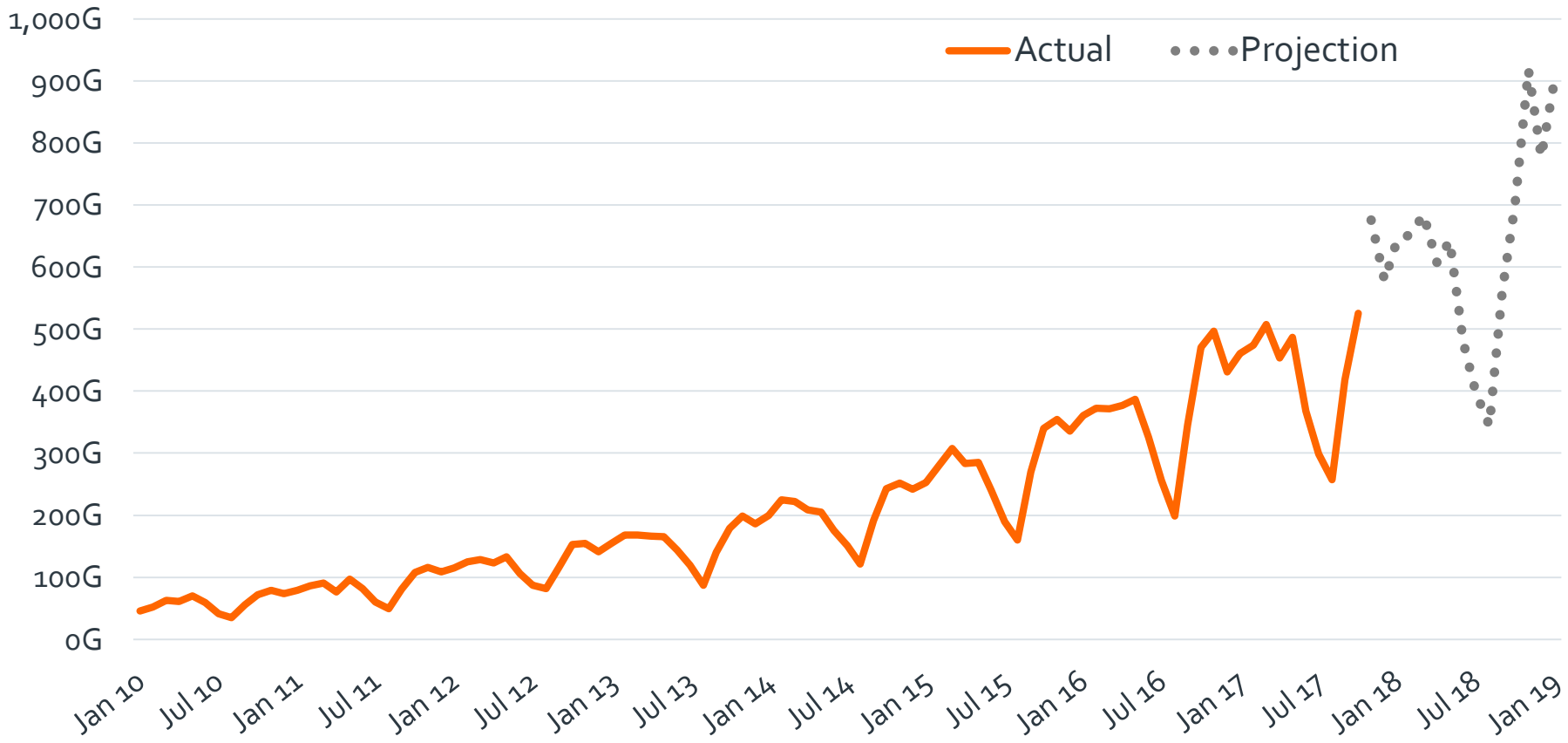
Jisc strategy, structure and reach



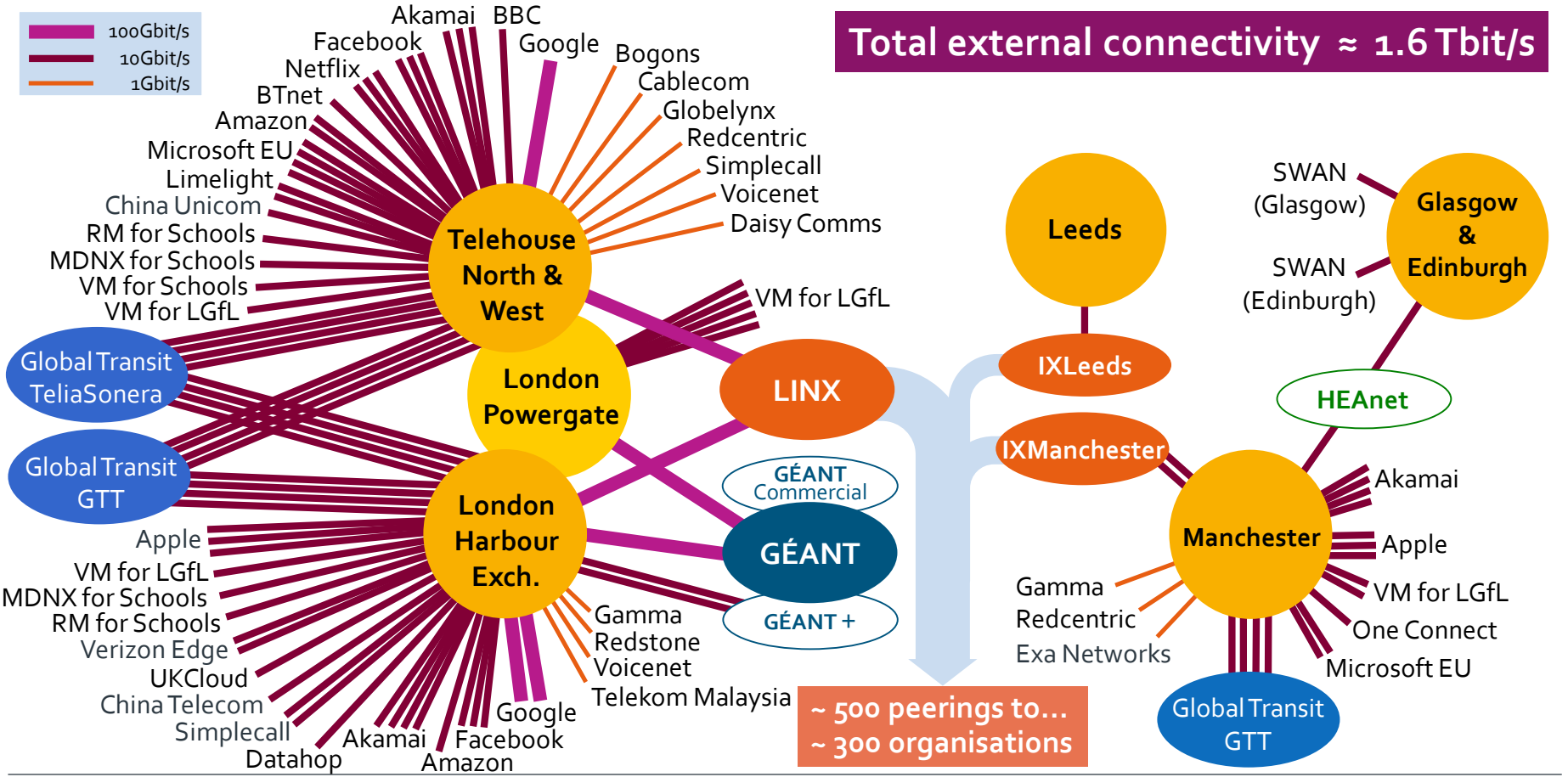
Janet network: current upgrade



Janet network: traffic volume



Janet network: external connectivity



Jisc, more than just a (Janet) network

- Jisc Technologies
  - Information security
  - **Trust and identity**
  - e-infrastructure
  - Shared data centres
  - **Cyber security**
  - Training
- Digital Resources
  - Jisc Collections Negotiation Service
  - Open Access Support
  - Library Support and Analytics Services
  - Resource Discovery
  - Digital Content
- Digital Futures
  - Digital capabilities and student experience
  - Learning analytics
  - Research data shared service
  - The intelligent campus

Trust and identity

- Provide services for Jisc members
  - UK Access Management Federation (web SSO)
  - eduroam (wireless roaming
  - Certificate (SSL certificates)
  - Assent (non-web SSO)
- Provide services for Jisc members
  - Managed federation
  - Fully managed service for operating an identity federation
    - ✓ In pilot, you can join! managedfederation@jisc.ac.uk for more info
  - Liberate
  - Managed service for access management solutions:
    - Identity federation, eduroam, IP Authentication, Moonshot
    - ✓ Production service you can join! Liberate@jisc.ac.uk for more info

Cyber security

» Penetration testing

› Evaluate and improve the security of your members' networks by simulating real world attacks

› Successfully testing Jisc members for a year and can be done internationally too

✓ Looking to share experiences and collaborate with other NRENs

» DDoS mitigation services

› Defend your customers against Denial of Service attacks

› Defending our members' networks for the past 30 years

› Finding things that can help domestically and globally

✓ Looking to do a pilot with Jisc – we can help

» https://www.jisc.ac.uk/network/security

What is transnational (or cross-border, borderless, offshore) education?

» **Transnational education (TNE)** is the mobility of higher education programmes and institutions/providers across international borders

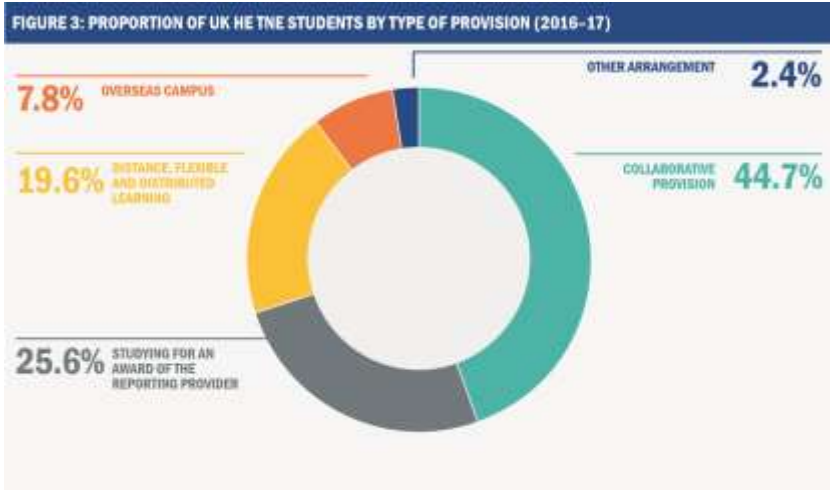
Independent	Collaborative
Franchise programmes	Partnership programmes
International branch campus	Joint universities/colleges
Self-study distance education	Distance education with local academic partner

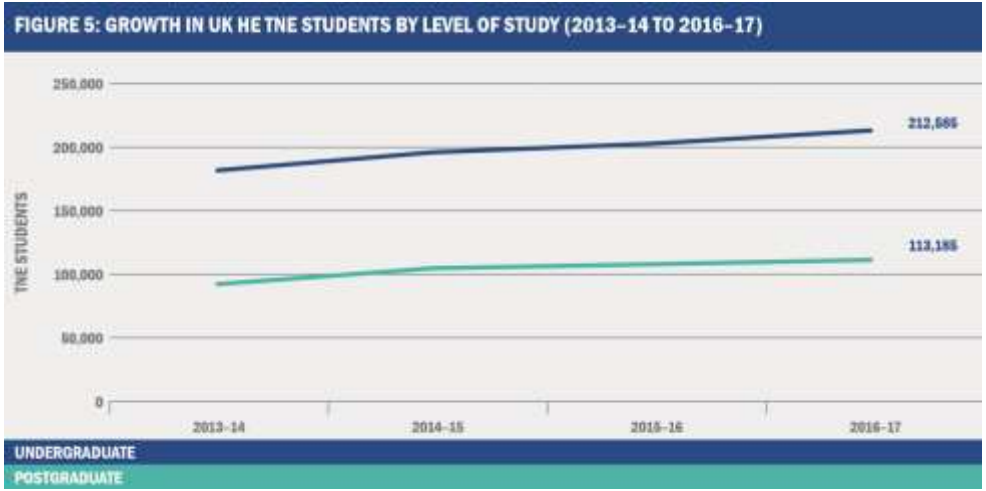
* British Council "Transnational education: a classification framework and data collection guidelines", May 2017

Fundamental aspects of TNE

- Global teaching and learning
  - Achieving the highest levels of pedagogical impact in the classroom and beyond
    - Synchronous: new pedagogical models, experiential and location based learning, hands on fieldwork in different parts of the world; simultaneous T&L across time and space
    - Asynchronous: online learning, learning platforms
- The global student
  - Supporting mobility on and off campus, in whichever country, learn collectively and opportunities to supplement and accentuate student experience
- Global administration and support
  - Shared systems e.g. student records, examination and enrolment systems

UK Facts and figures (HE)





TNE in the Middle East

Countries hosting the most UK HE TNE students in the ME

RANK	2014–15	2015–16	NUMBER OF STUDENTS IN 2015–16	RANKING CHANGE FROM 2014–15 TO 2015–16
1	Oman	Oman	17,495	SAME
2	United Arab Emirates	United Arab Emirates	12,585	SAME
3	Saudi Arabia	Saudi Arabia	2,620	SAME
4	Qatar	Qatar	1,590	SAME
5	Bahrain	Bahrain	645	SAME
6	Kuwait	Kuwait	605	SAME
7	Lebanon	Lebanon	485	SAME
8	Jordan	Jordan	360	SAME
9	Israel	Iran	105	↑ UP 1
10	Iran	Israel	100	↓ DOWN 1

Case study: UAE

Overview

- Eleven UK Branch Campuses in Dubai:
  - Strathclyde, Heriot-Watt, Middlesex, Manchester Business School, London Business School, Exeter, CASS Business School, Bradford, Bolton, Birmingham, [CIC]
- All currently connected to local ISP's, Du and Etisalat
- Two approached Jisc for new connectivity – growth in requirements, short and long term
- Current local NREN arrangements (Ankabut):
  - 155Mbps link via Internet2
  - Open policy for connecting overseas R&E institutions
  - Aspiration to be local hub
- Multiple stakeholders: Jisc, Ankabut, GÉANT, Internet2, ASREN, Universities (UK and wider)
- Five options for connectivity, short and long term
- Jisc customers would like Jisc to be contracting agent

Case study: UAE

Opportunities

- Relationship building
- Capacity building
  - NREN growth
  - New services
  - Local/regional hub
- Longer term planning
- Facilitation role

Challenges

- Timeliness
- Short term uncertainty
- Accountability and track record
- Business models and financial commitment

Developing TNE support: Global

GÉANT SIG-TNE

- Established GÉANT SIG (February 2017) for TNE led by Steering Committee:
  - CERNET (Wan Li)
  - GARR (Claudio Allocchio)
  - Internet2 (TBC)
  - Jisc (Esther Wilkinson, Chair)
  - SURFnet (Alexander van den Hil)
  - AARNET(TBC)
- SIG-TNE Wiki site - https://wiki.geant.org/display/TNE/SIG-TNE+Home

- Challenge areas:
  - TNE data – regional, national and global
  - Global TNE policies
  - Technology barriers and TNE service development
  - Tools, toolkits and resources
- Key output **'NREN Resource Pack for TNE'** (Dec 2018)
- Sessions will be held at APAN (South Korea), Internet2 Global Summit (Washington) and TNC19 (Tallin) in 2019

Developing TNE support: Jisc

Current TNE support

- Jisc Global Connect and Global Partnership services
- Establishing eduroam
- Template SLAs, standard agreements, TNE registration forms
- Overseas licensing (software, digital resources)
  - Jisc pilot project launched October 2017
- Digital Student Insights Pilot
- Case studies
- HEI Tech Guide

Developing TNE services

- 24/7 global support desk
- E2E reporting
- Digital capabilities
- Cybersecurity
- VLE review

Addressing evolving TNE challenges

- Addressing concerns regarding impact of Chinese government policy on VPNs in China e.g. access to content on VLE's hosted overseas for teaching and learning

Further information