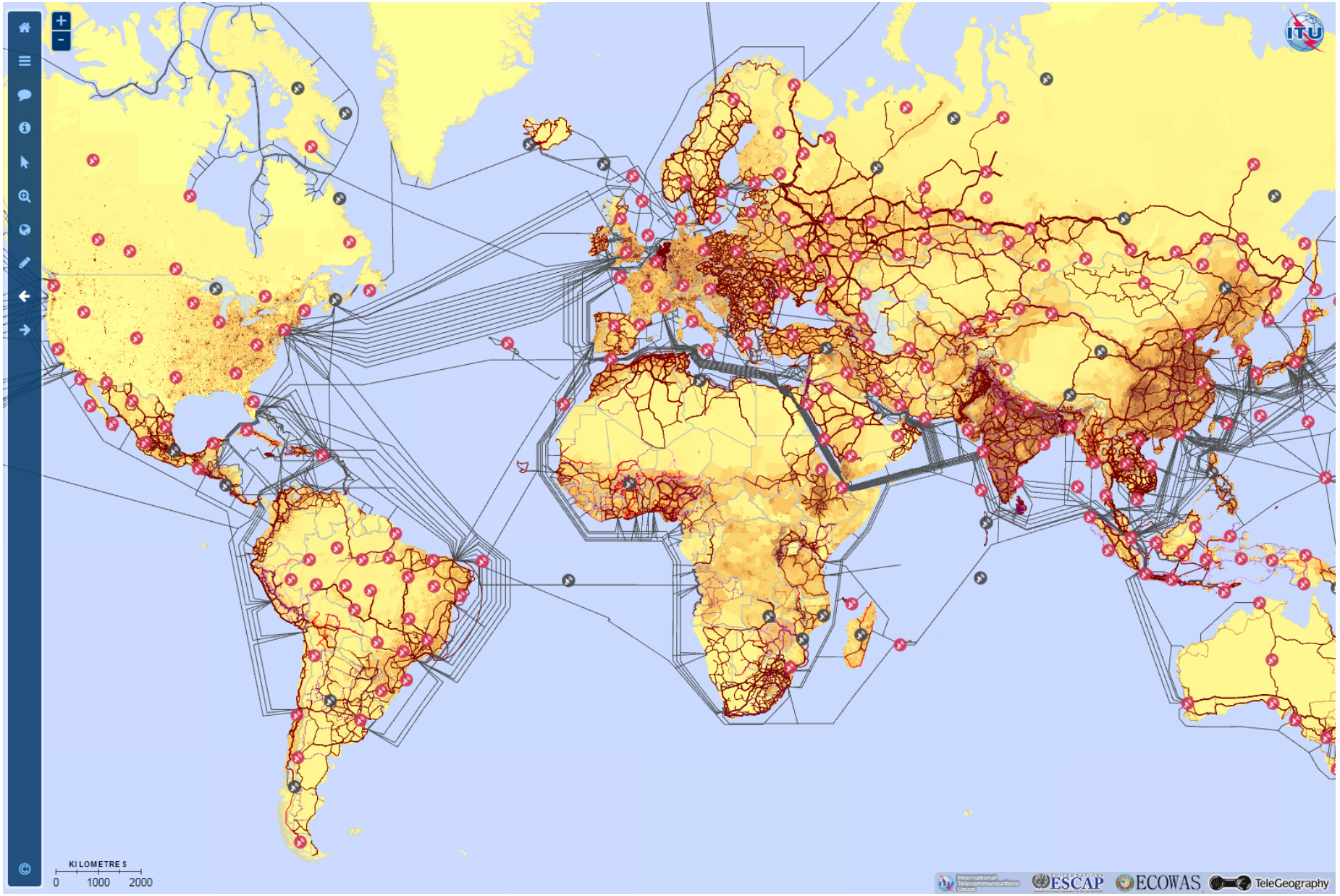
ITU Interactive Transmission Maps

User Guide

September 2017

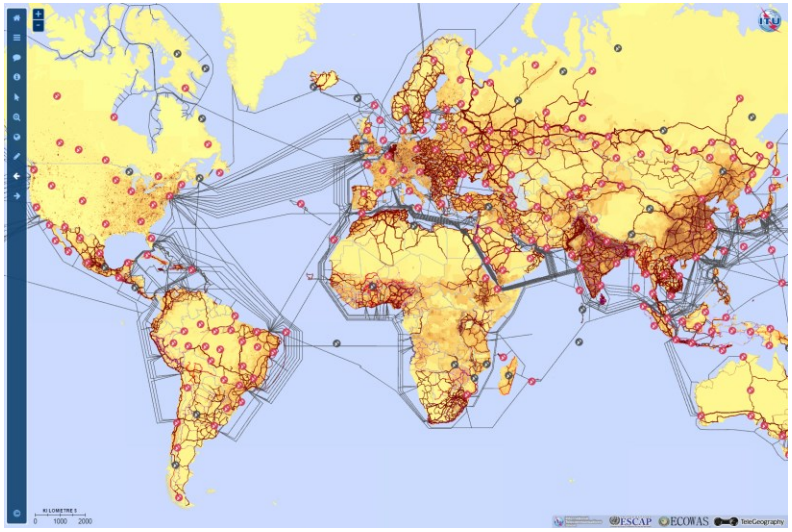
ITU Interactive Transmission Maps



Topics covered

- Introduction
- Statistics
- Layers
- Validation Framework
- Indicators

Introduction



1) Purpose: To quantify supply-side indicators for the reach of broadband networks.

2) Research: Desk research, primary research in conjunction with ITU Regional Offices, and working with partner organisations.

3) Validation: The map is validated by network operators and administrations through the ITU Regional Offices and recorded in the Validation Framework.

4) Outputs: Broadband Capacity Indicators.

Broadband Transmission Capacity Indicators

Underneath the map is a database, containing records of each individual link. The following indicators are either compiled or calculated from this database:

Indicator 1: **Transmission network length (Route kilometres)**

Indicator 2: **Node locations**

Indicator 3: **Equipment type of terrestrial transmission network**

Indicator 4: **Network capacity (bit rate)**

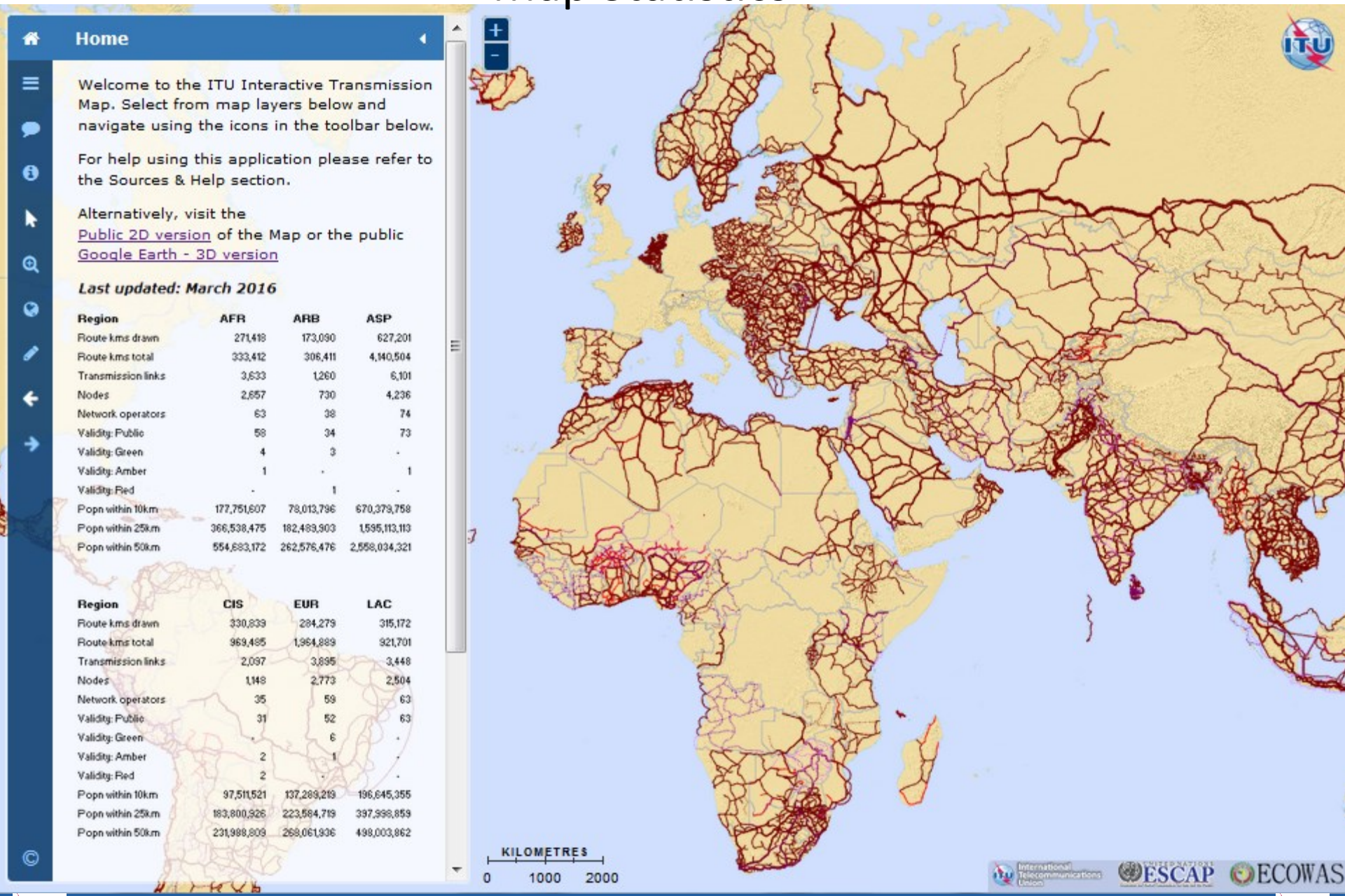
Indicator 5: **Number of optical fibres within the cable**

Indicator 6: **Operational status of the transmission network**

Indicator 7a: **Percentage of population within reach of transmission networks**

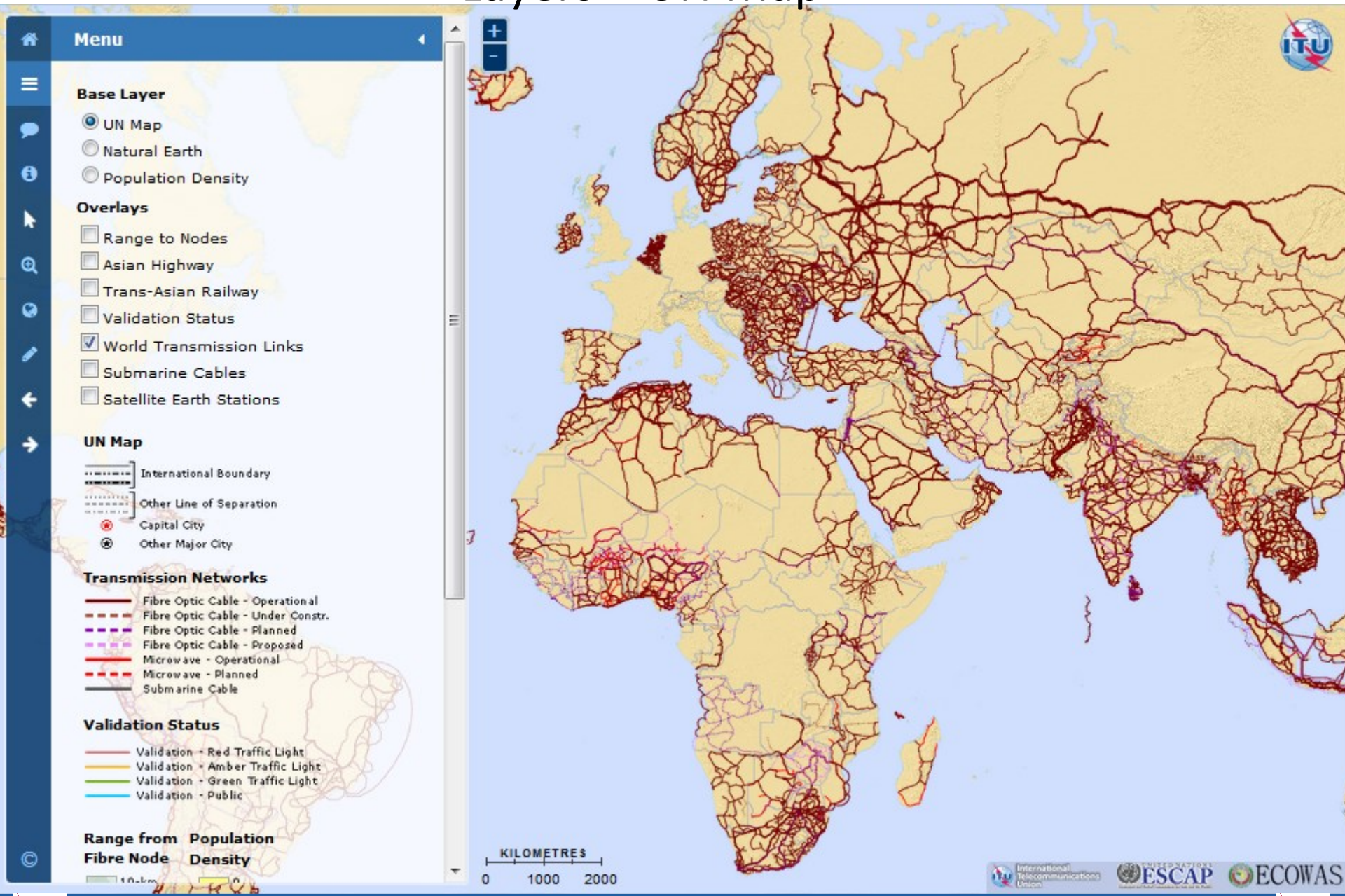
Indicator 7b: **Percentage of area within reach of transmission networks**

Map Statistics



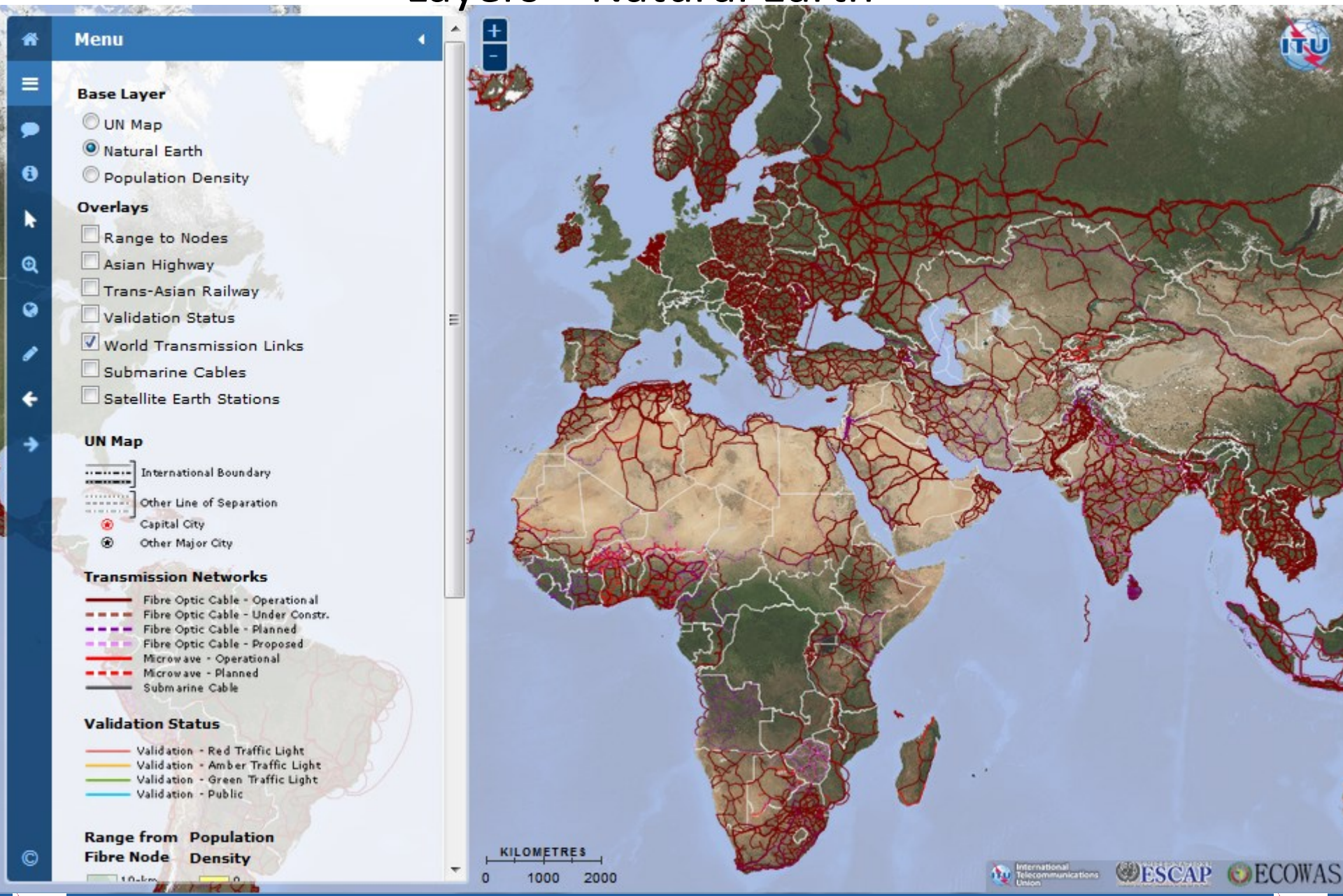
http://www.itu.int/itu-d/tnd-map-public/

Layers – UN Map



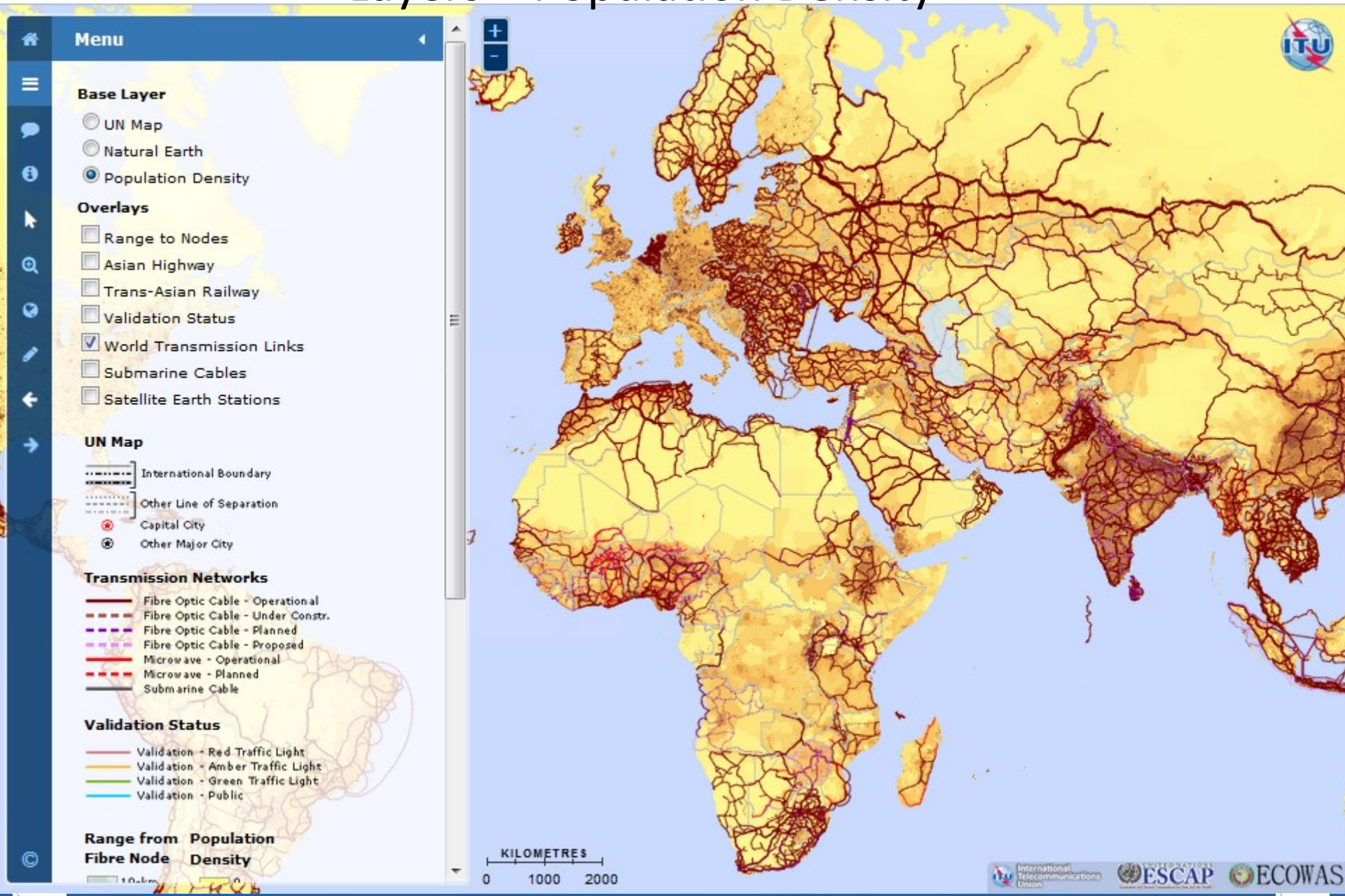
http://www.itu.int/itu-d/tnd-map-public/

Layers – Natural Earth



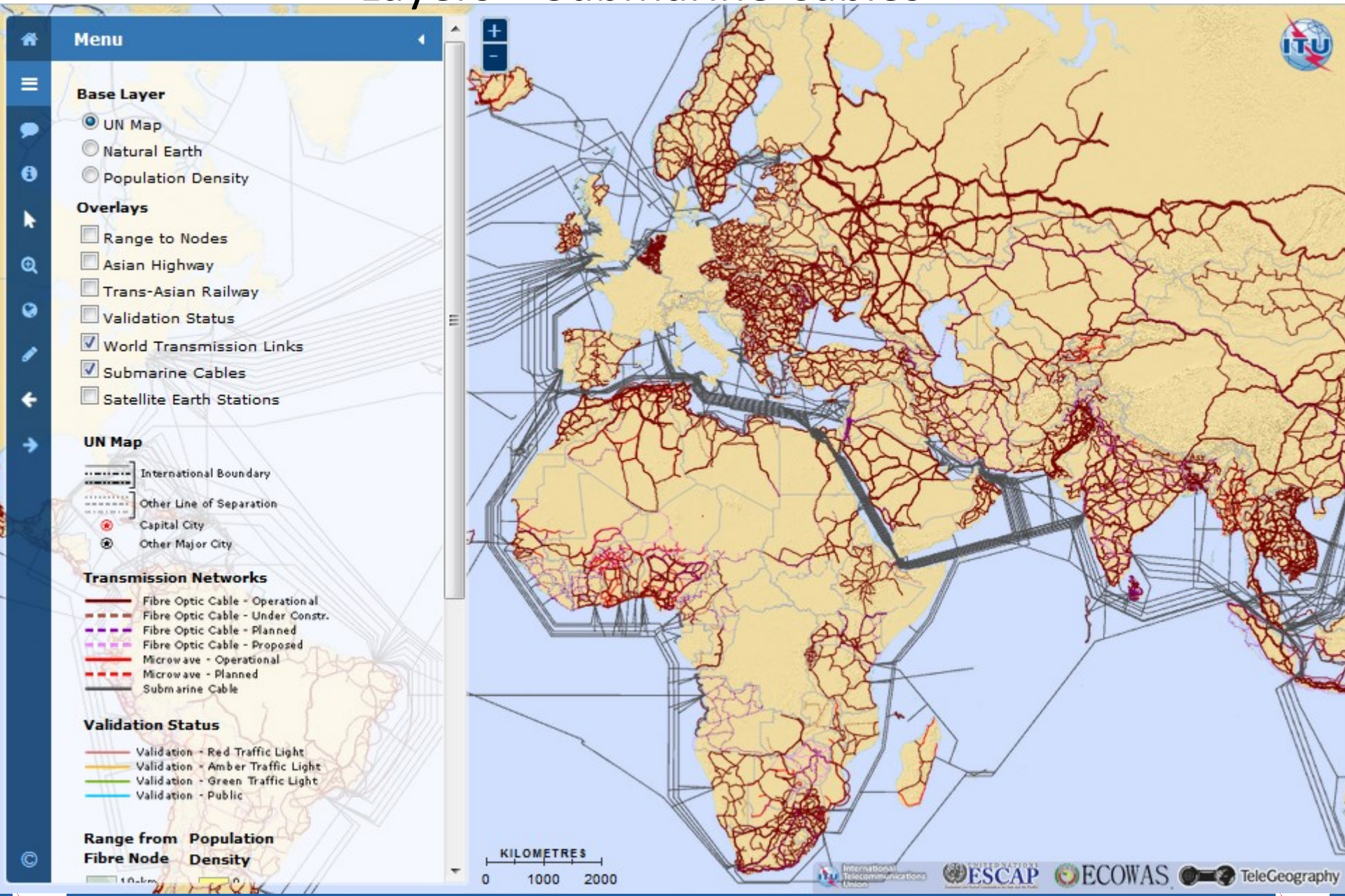
http://www.itu.int/itu-d/tnd-map-public/

Layers – Population Density



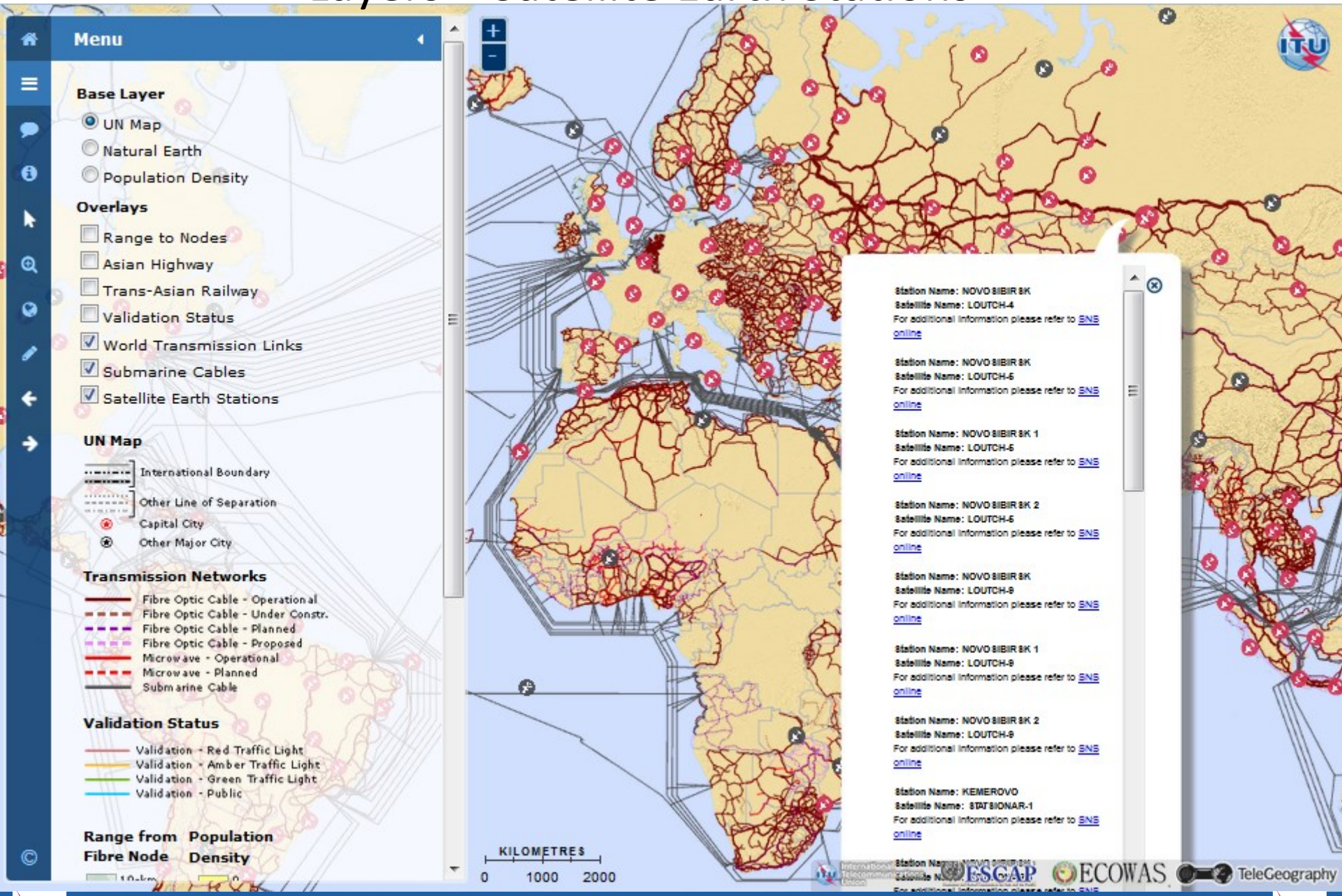
http://www.itu.int/itu-d/tnd-map-public/

Layers – Submarine Cables



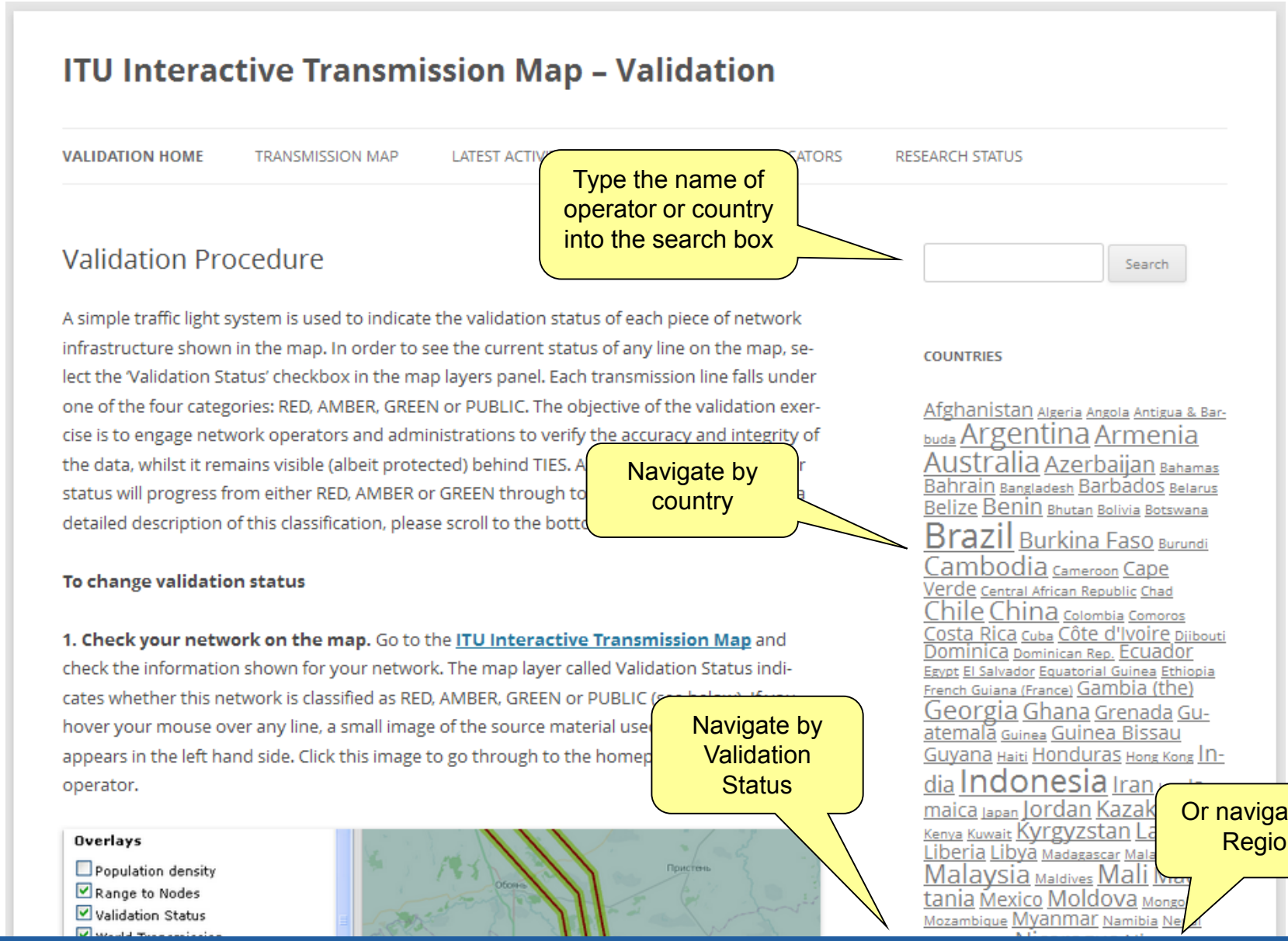
http://www.itu.int/itu-d/tnd-map-public/

Layers – Satellite Earth Stations



http://www.itu.int/itu-d/tnd-map-public/

TIES Password Protected Map and Validation Framework



http://www.itu.int/itu-d/tnd-map-public/

ITU Interactive Transmission Map – Validation

To validate the information shown in the map, leave a comment or any other feedback, just click the **Leave a Reply** link.

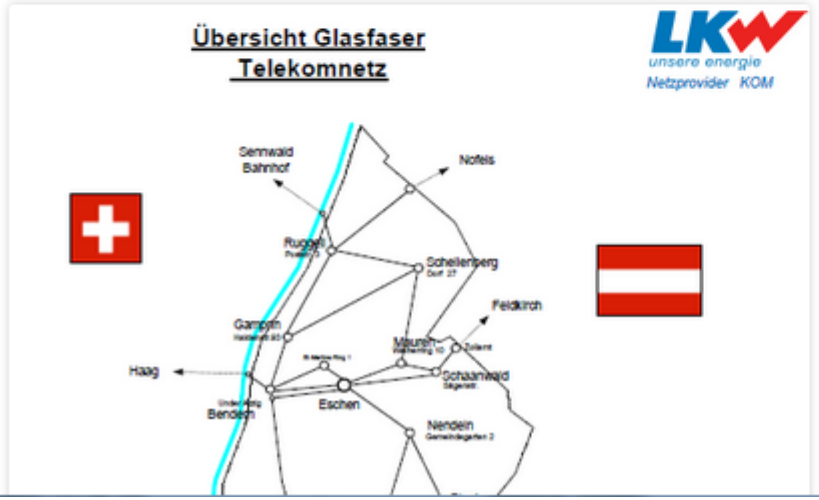
RANSMISSION MAP | LATEST ACTIVITY | USER GUIDE | INDICATORS | RESEARCH STATUS

Search

iechtenstein: Liechtensteinische Kraftwerke

Leave a reply

Source: **Liechtensteinische Kraftwerke (LKW)**, 2013.



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ITU Interactive Transmission Map – Validation

VALIDATION HOME | TRANSMISSION MAP | LATEST ACTIVITY | USER GUIDE | INDICATORS | **RESEARCH STATUS**

Research Status

This table shows the research, production and validation status of each network operator. Filter the map by clicking on the up and down arrows to sort by research, production or validation status. This table is updated at the end of each month. Last Updated: **1 April 2016.**

The Research Status table is updated at the end of each month

Show 25 entries Search:

COUNTRY	REGION	OPERATOR	DATA	PUBLIC	RFI	ADDED	MAP	STATUS	VALID
Albania	EUR	ALBtelecom	Y	Y	0	Y	Y	Public	N
Albania	EUR	ATU	Y	Y	0	Y	Y	Public	N
Austria	EUR	Tele2	Y	Y	0	N	N	Pending	N
	EUR	Mobistar	Y	Y	0	Y	Y	Public	N
		Syntigo	Y	Y	0	Y	Y	Public	N
		GCN	Y	Y	0	Y	Y	Public	N
Bulgaria	EUR	Neterra	Y	Y	0	Y	Y	Public	N
Bulgaria	EUR	Novatel	Y	Y	0	Y	Y	Public	N

Click link here to go through to the operators homepage

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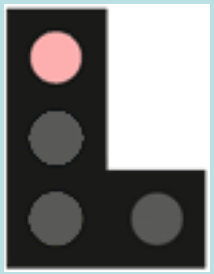
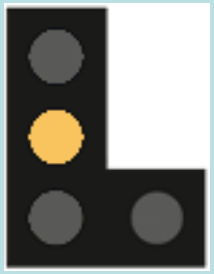
Each link in the map is given a validation status.

We use a simple traffic light system:

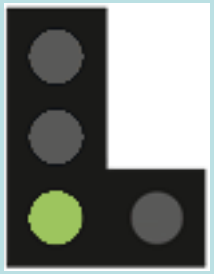
Validation - Red Traffic Light
Validation - Amber Traffic Light
Validation - Green Traffic Light
Validation - Public



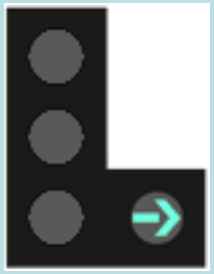
Red: Information was sourced from a restricted document (for example on TIES), a potentially unreliable publicly available source (such as a third party), may contain information which is confidential or regarded as sensitive by the network operator, and/or is very old and could be out of date (if it is more than 3-5 years old). Information must be validated by network operator or stakeholder to provide clearance that the information is correct, up-to-date, and is not confidential.



Amber: Information was not taken from a publicly available source, may be unreliable because of difficulties reading or interpreting the source material, and/or may be old and out of date. Operator is asked to provide clearance that the information is correct, up-to-date, and is not confidential.



Green: Information was sourced from an authentic, reliable publicly available source (such as a company website, annual report, presentation, or other publication), and has been deliberately put into the public domain by the network operator or administration (it is therefore not confidential). The information is current and correct, and there is no reason why a public version could not be put into the public domain.



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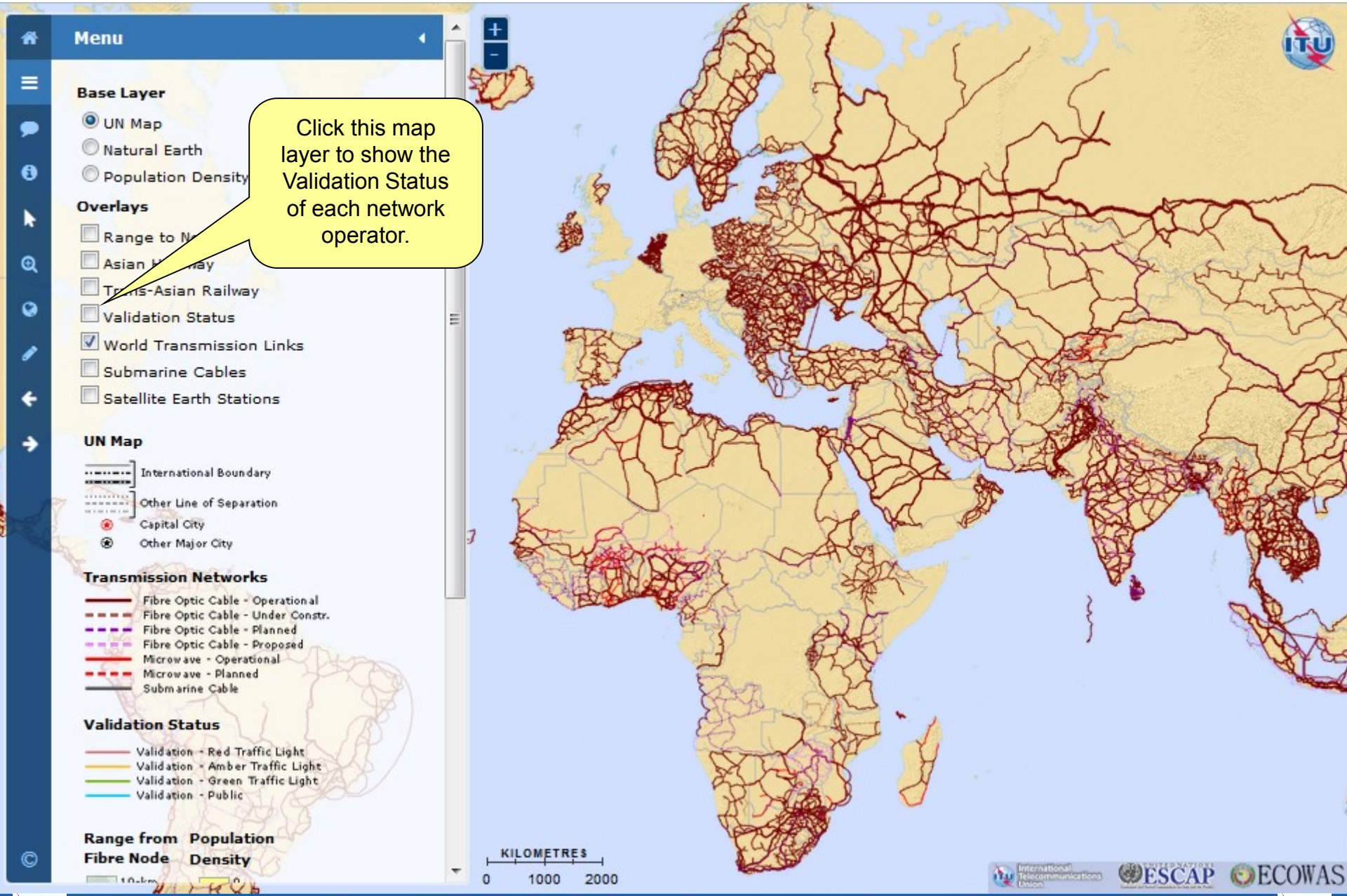
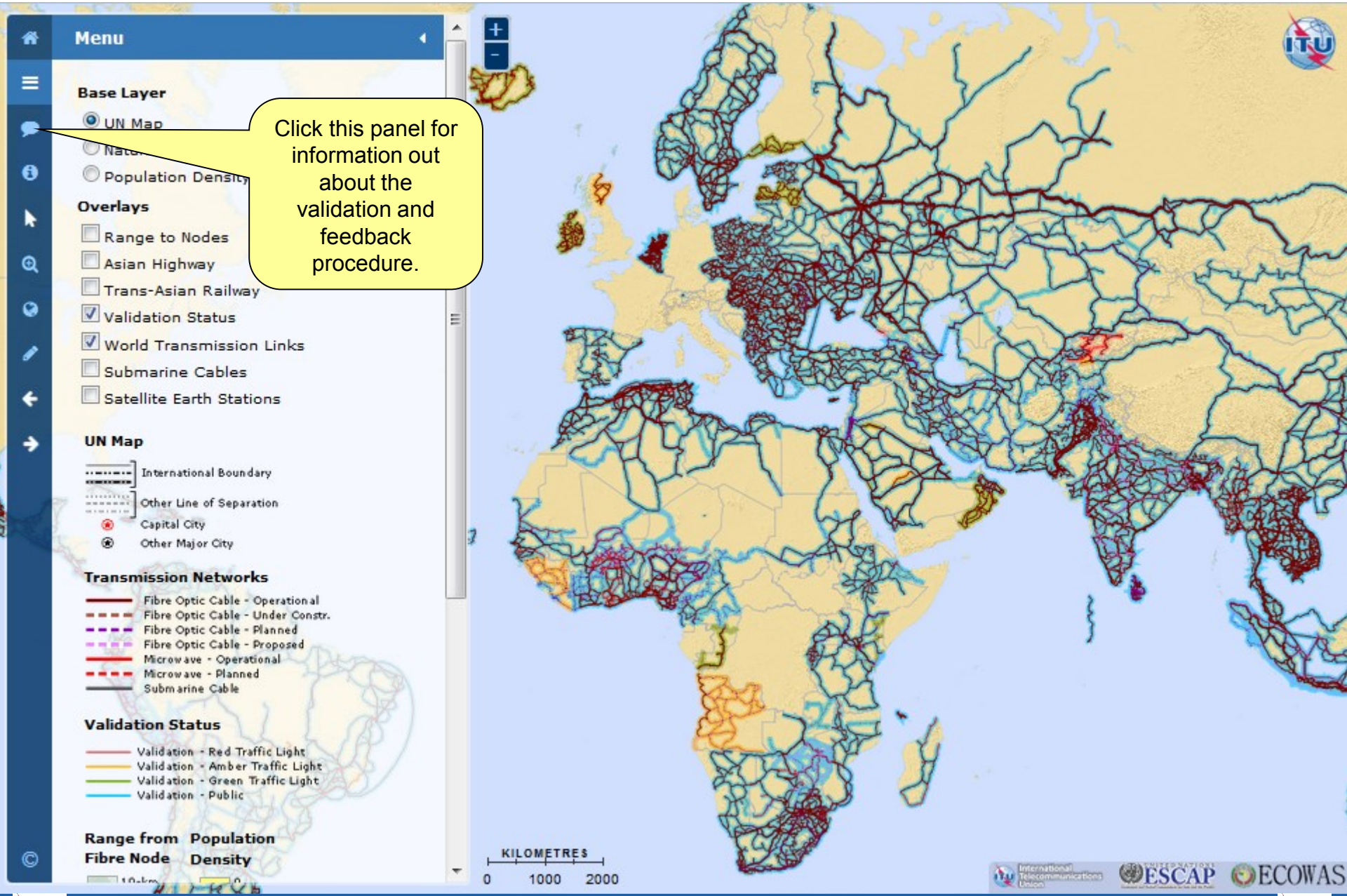


http://www.itu.int/itu-d/tnd-map-public/



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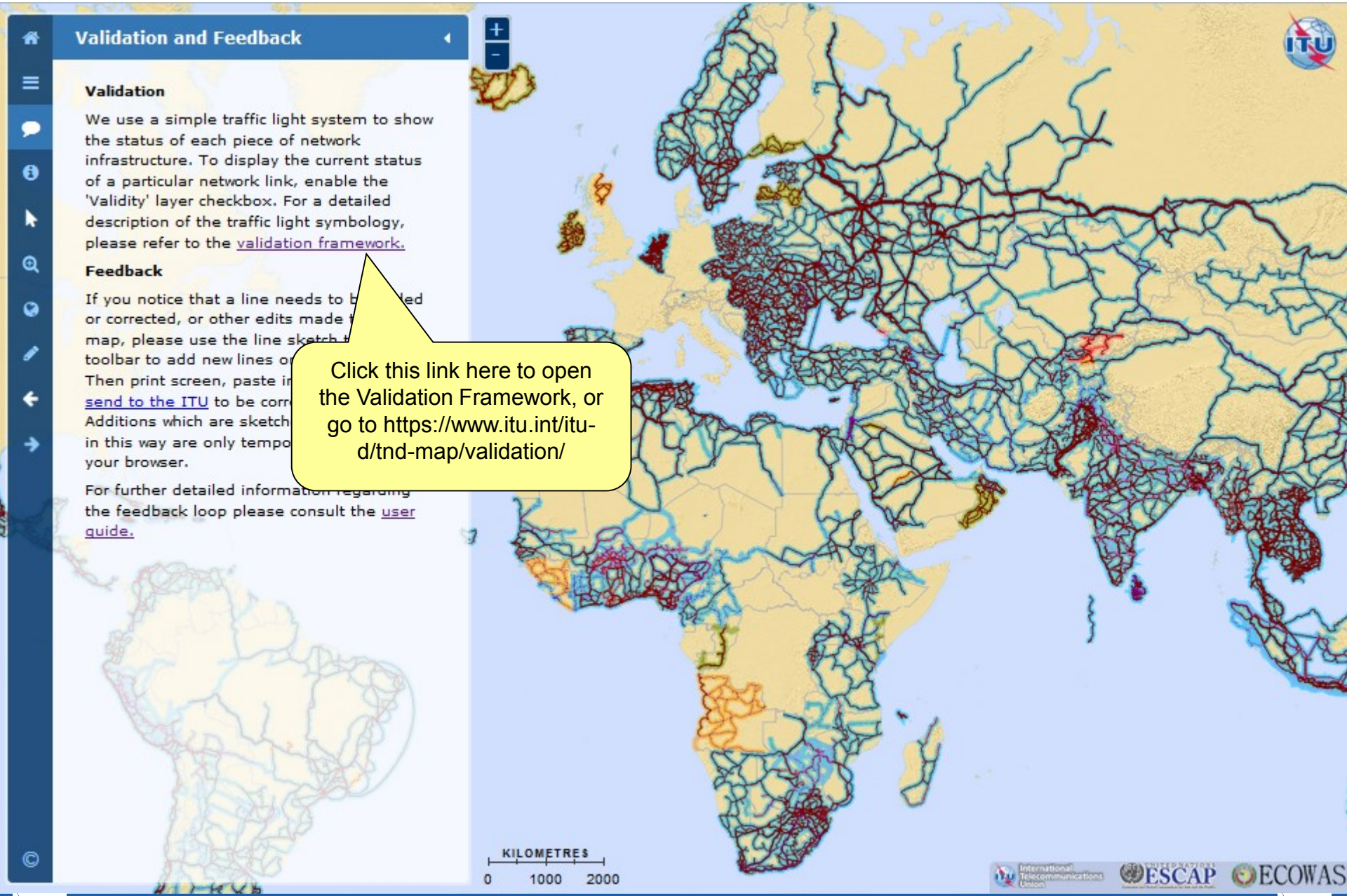

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ITU Interactive Transmission Map – Validation

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Indicators

Broadband Capacity Indicators

Indicator 1: Transmission network length (Route kilometres)

Indicator 7a: Population within reach of transmission networks

Indicator 7b: Area within reach of transmission networks

Indicator Definitions

Indicator 1: **Transmission network length (Route kilometers)**

Definition: *Transmission network length* refers to the physical length of fibre optic cable in a network irrespective of the number of optical fibres contained within the constituent cables of that network (see Indicator 5: Cable structure), and can also be applied to microwave terrestrial networks. It is is expressed in route kilometres (route-kms).

Clarifications and scope: Transmission network length (Route kilometers) can also be applied to microwave terrestrial transmission networks in order to enable comparison on a like-for-like basis, even though the number of microwave 'hops' is also used (a 'hop' is the point-to-point link between one microwave radio antenna and the next, for example there are four 'hops' between

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Indicator 1: Route Kilometres

Search

Indicator 1: Transmission network length (Route kilometres)

Show 50 entries Search:

COUNTRY	RE-GION	ROUTE KMS 2013	ROUTE KMS 2014	ROUTE KMS 2015	OPERATORS
Bosnia and Herzegovina	EUR	n.a.	n.a.	n.a.	
Bulgaria	EUR	n.a.	8,923	8,923	GCN, Neterra, Novatel
Croatia	EUR	n.a.	-	3,300	HEP, Unitel
Cyprus	EUR	n.a.	865	865	CYTA, Primetel
Czech Republic	EUR	n.a.	12,626	12,626	CR, Dial Telecom, GTS, Level 3
Denmark	EUR	n.a.	-	40,586	Nianet, TDC
Estonia	EUR	n.a.	5,371	5,371	ELA
Finland	EUR	n.a.	-	10,000	Cinia

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Indicator 7a: Population within reach of transmission networks

Indicator 7a: Population within reach of transmission networks 2015

Show 25 entries Search:

COUNTRY	REGION	10-KM	25-KM	50-KM	10-KM	25-KM	50-KM
Czech Republic	EUR	69.8	98.5	100.0	7,517,286	10,618,623	10,777,060
Denmark	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Estonia	EUR	86.9	99.2	100.0	1,112,721	1,270,053	1,280,171
Finland	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Germany	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Greece	EUR	43.2	80.4	94.8	4,810,995	8,945,547	10,550,060
Hungary	EUR	60.9	98.1	100.0	6,031,092	9,721,828	9,911,396

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Indicator 7b: Area within reach of transmission networks

Search

Indicator 7b: Area within reach of transmission networks 2015

Show 25 entries Search:

COUNTRY	RE-GION	10-KM	25-KM	50-KM	10-KM	25-KM	50-KM
Czech Republic	EUR	44.8	96.2	100.0	84,521.8	181,411.0	188,612.9
Denmark	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Estonia	EUR	47.8	96.8	100.0	80,072.9	162,247.0	167,625.3
Finland	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Germany	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Greece	EUR	12.1	54.7	90.6	26,601.0	120,505.7	199,535.1
Hungary	EUR	35.2	96.1	100.0	70,927.8	193,641.5	201,411.8
Iceland	EUR	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

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ITU Interactive Transmission Map – Validation

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Research Status

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The Research Status table is updated at the end of each month

Show 25 entries Search:

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Albania	EUR	ALBtelecom	Y	Y	0	Y	Y	Public	N
Albania	EUR	ATU	Y	Y	0	Y	Y	Public	N
Austria	EUR	Tele2	Y	Y	0	N	N	Pending	N
	EUR	Mobistar	Y	Y	0	Y	Y	Public	N
		Syntigo	Y	Y	0	Y	Y	Public	N
		GCN	Y	Y	0	Y	Y	Public	N
Bulgaria	EUR	Neterra	Y	Y	0	Y	Y	Public	N
Bulgaria	EUR	Novatel	Y	Y	0	Y	Y	Public	N

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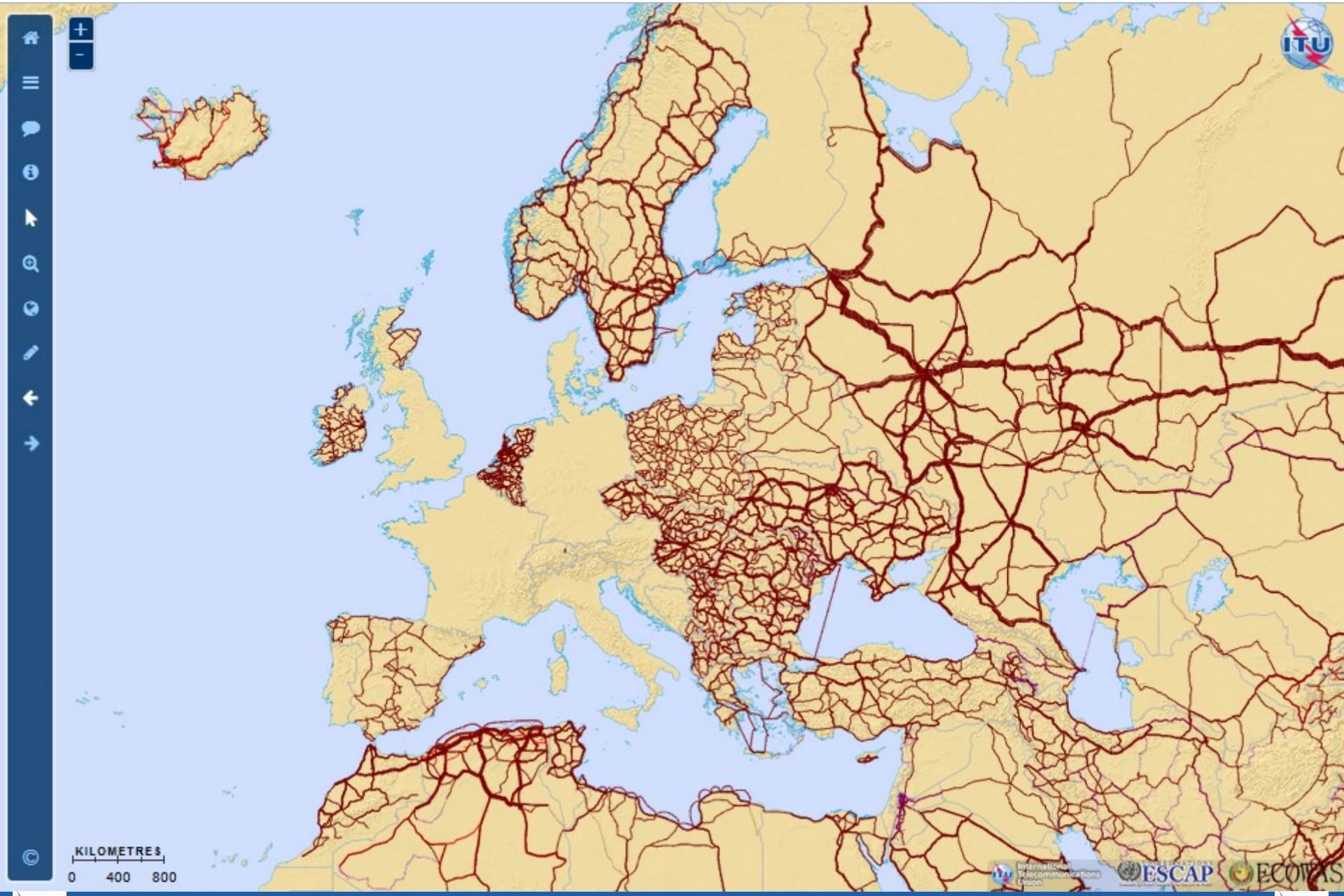

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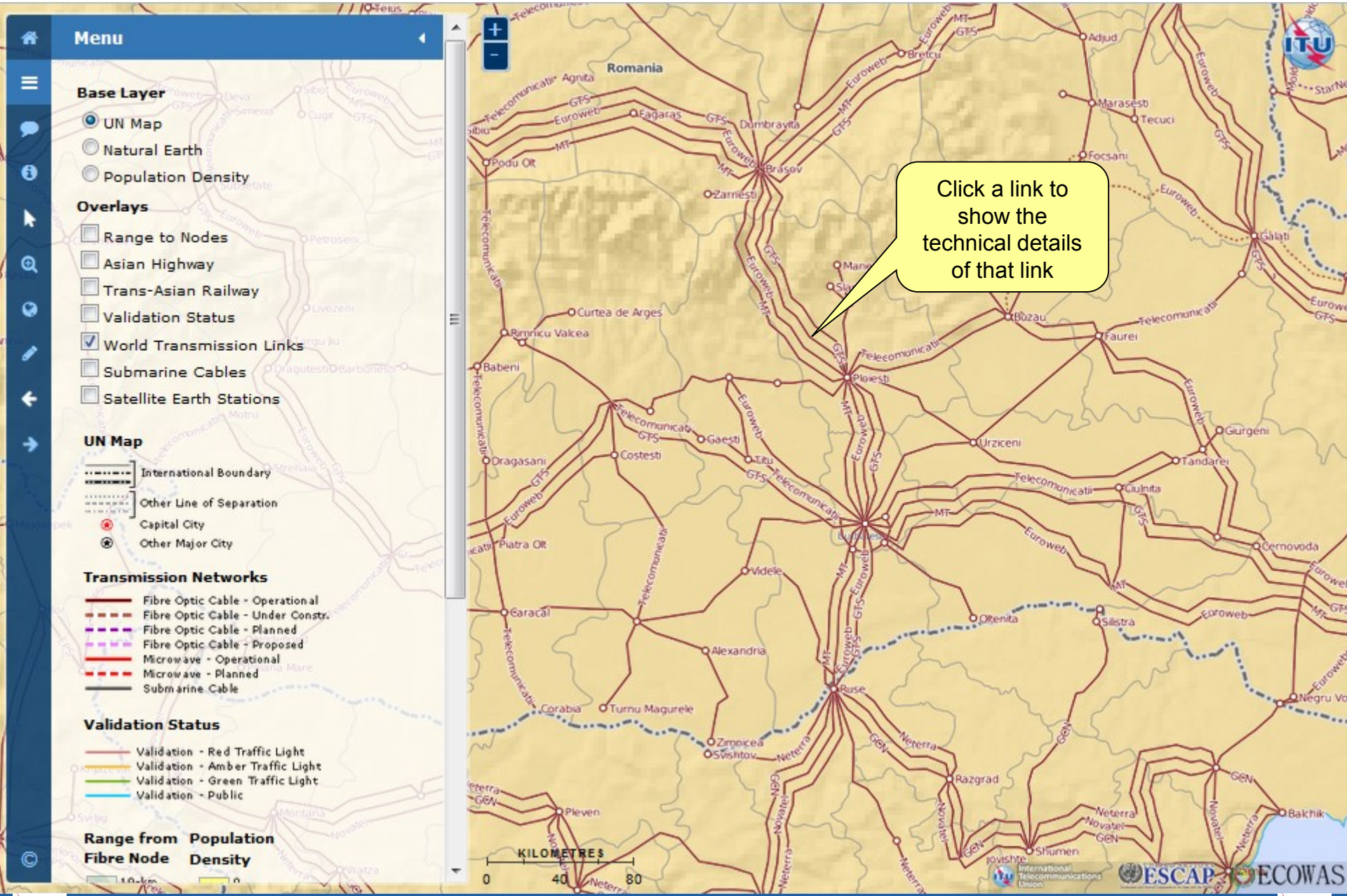

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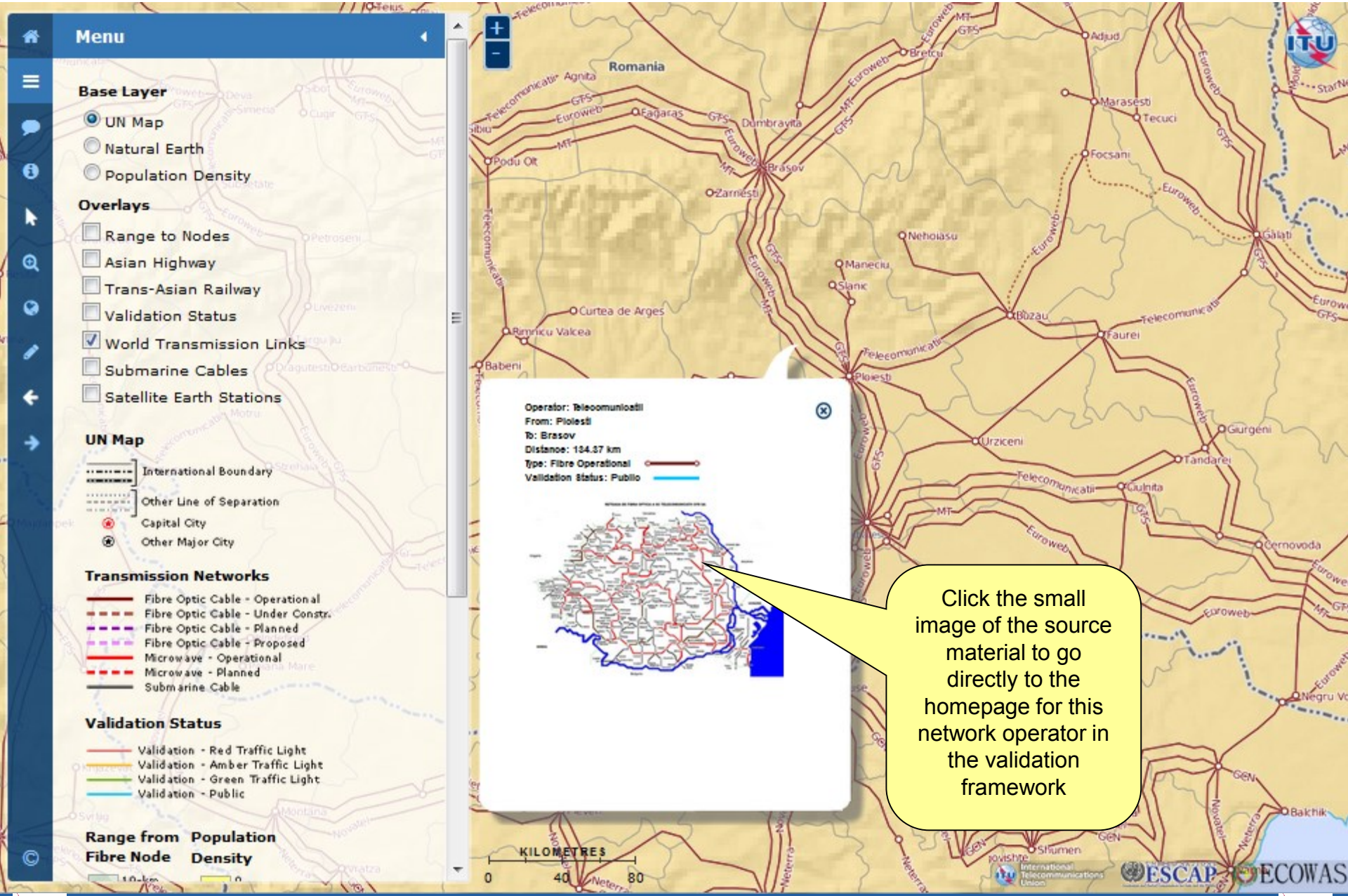
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Validation - Green Traffic Light
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Range from Fibre Node
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Operator: Telecomunicatii
From: Ploiesti
To: Brasov
Distance: 134.87 km
Type: Fibre Operational
Validation Status: Public
Click the small image of the source material to go directly to the homepage for this network operator in the validation framework
KILOMETRES
0
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80
Romania
Bucuresti
Ploiesti
Brasov
Buzau
Focsani
Galati
Braila
Adjud
Tecuci
Marasesti
Faurei
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Tandarei
Gaujnita
Cernovoda
Negru Voda
Bakhik
Slobozia
Targoviste
Zarnesti
Dambrayita
Fagaras
Podu Ot
Curtea de Arges
Ramnicu Valcea
Babeni
Nehoiasu
Maneciu
Slanic
Telecomunicatii
Euroweb
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MT
ESCAP
ECOWAS

ITU Interactive Transmission Map – Validation

TAG ARCHIVES: ROMANIA

Romania: SC Telecomunicatii CFA SA

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Source: **SC Telecomunicatii CFA SA**, 2014. http://www.tccfr.ro/index-4.html

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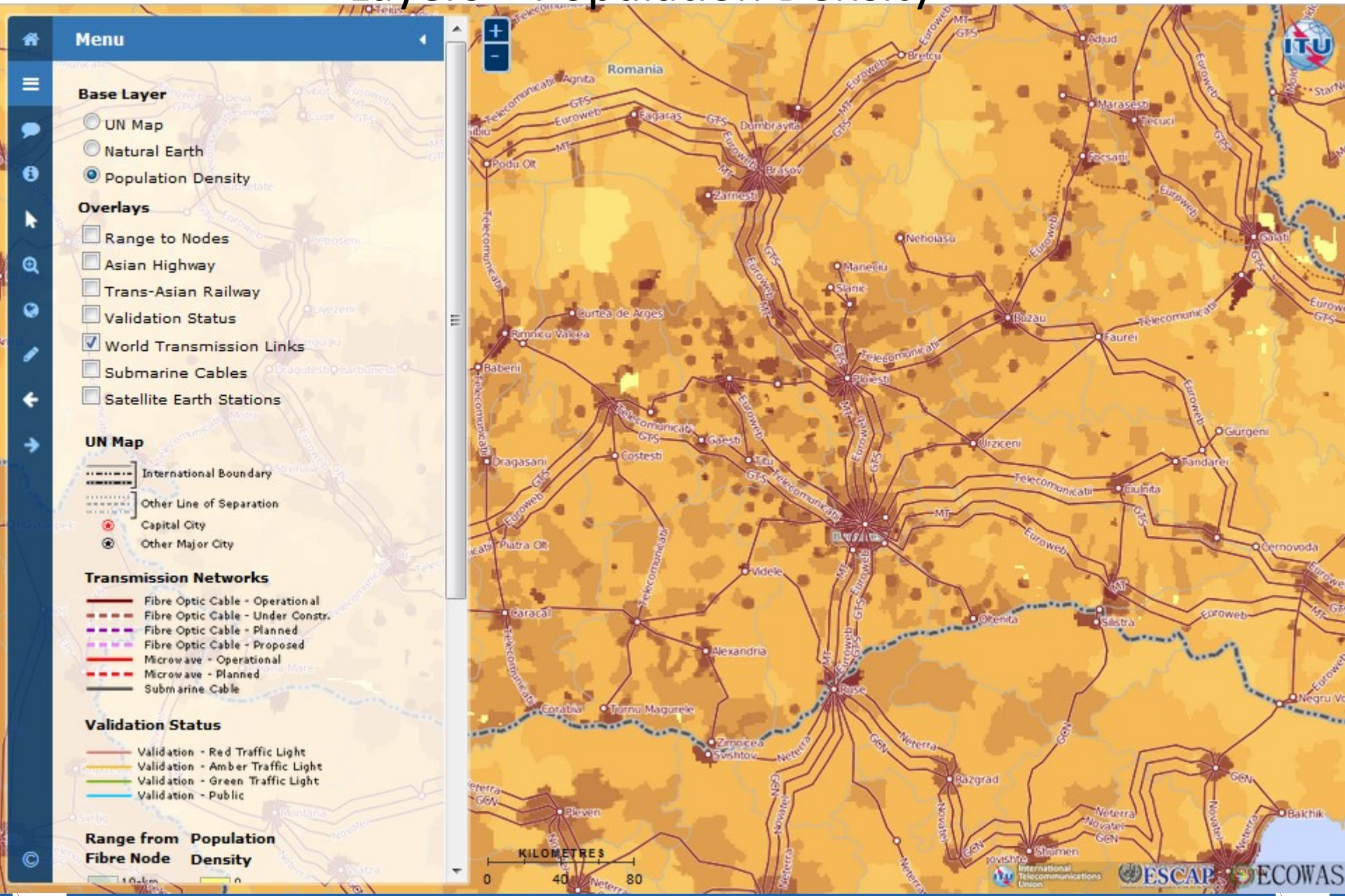
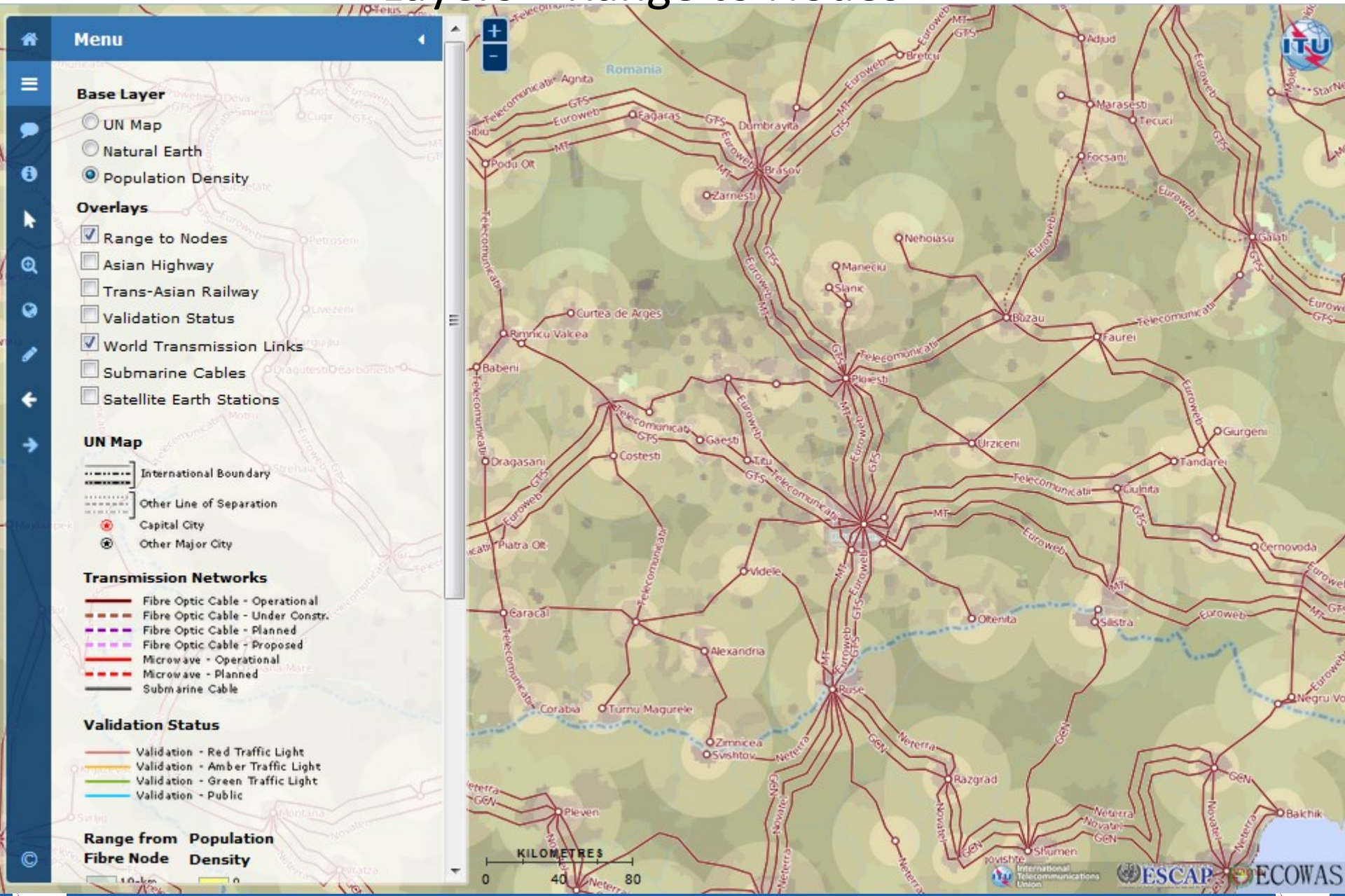
Layers – Population Density



http://www.itu.int/itu-d/tnd-map-public/

Layers – Range to Nodes



http://www.itu.int/itu-d/tnd-map-public/

Thank you

We value your feedback and contributions. Please log in using your ITU TIES username and password, to submit comments, feedback and to validate the information shown in the map through the Validation Framework.

Project homepage
http://itu.int/go/Maps

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