LAB WORK 04.

INTERNET BACKBONE, ISP TIERS AND DC TIERS. EXCURSION TO DC.

1. PURPOSE OF WORK

- 1.1. Get experience of career guidance on DC or ISP.
- 1.2. View of the technology of welding optical cable.
- 1.3. Get initial information about the Backbone level of Internet.

2. TASKS FOR WORK

- 2.1. Visit to a modern data center of ISP.
- 2.2. Study of technical data and designs of Fiber Optic media and connections (dark and light).
- 2.3. View short presentation about RETN Company and about solution on Backbone Internet.
- 2.4. Get initial information about the Backbone level of Internet for Your Region.

3. REPORT

Make a report about this work (Take a together selfie on Excursion Time and make Screenshot about Backbone of Your Region) and send it to the teacher's email.

REPORT FOR LAB WORK 04: INTERNET BACKBONE, ISP TIERS AND DC TIERS. EXCURSION TO DC.

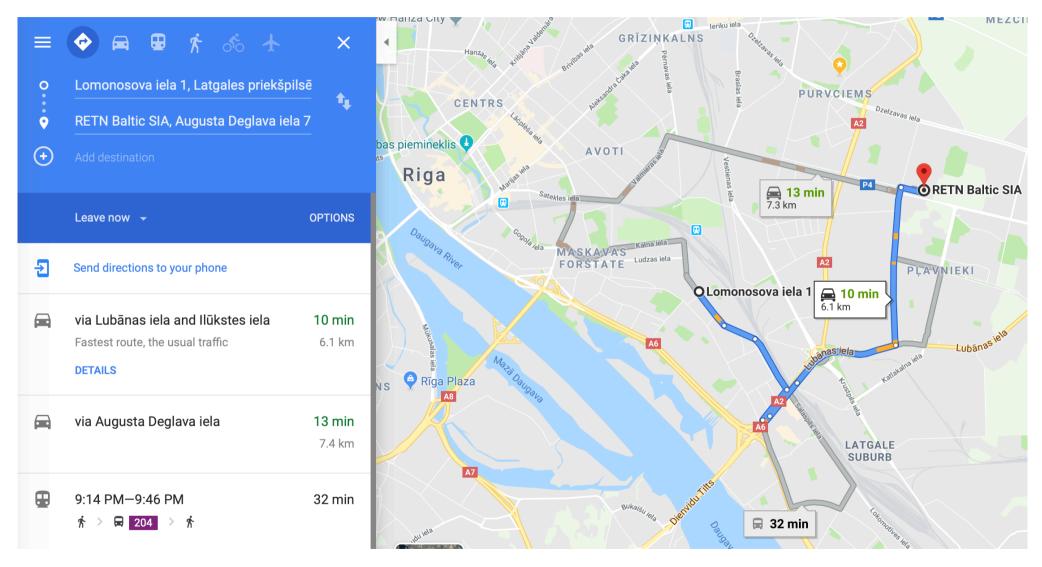
Student Name Surname	Student ID	Date

PHOTO 1, SCREENSHOT 1, SCREENSHOT 2.

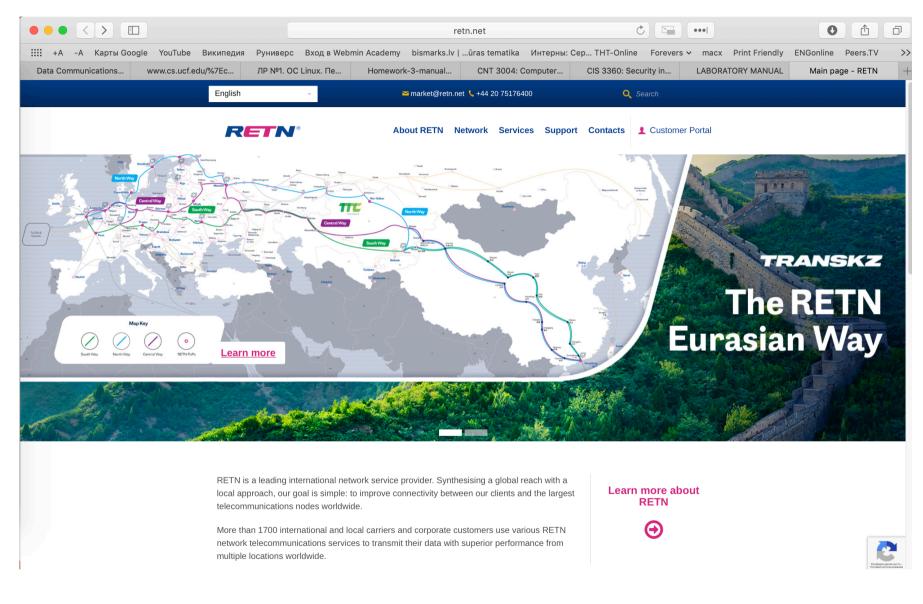


4. GUIDELINES

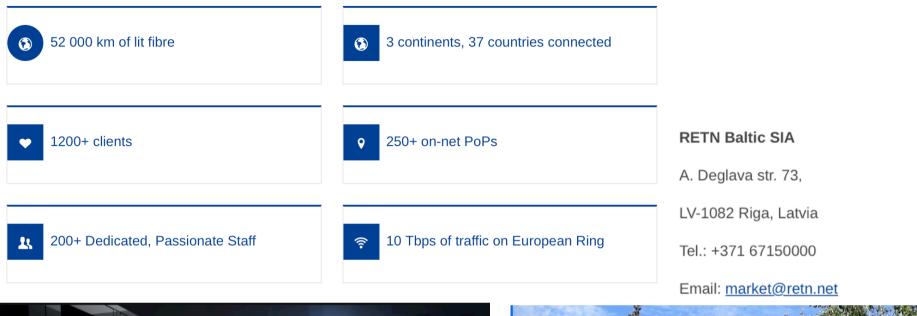
4.1. ROUTE FROM ISMA TO RETN COMP.



4.2. ABOUT ISP RETN COMPANY (<u>HTTP://RETN.NET</u>).



KEY FACTS ABOUT RETN





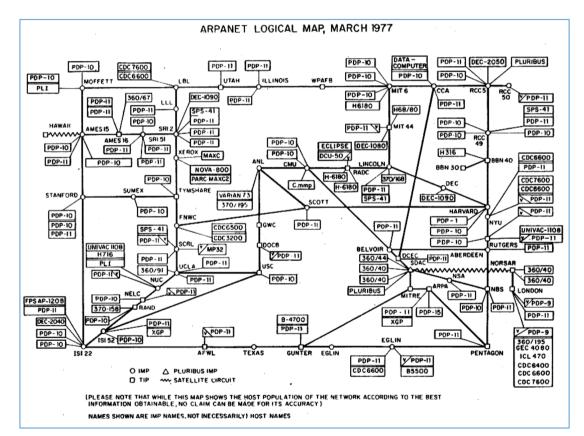


4.3. ABOUT BACKBONE OF INTERNET.

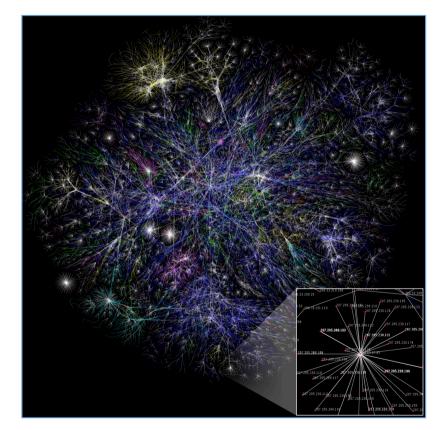
4.3.1. Internet and Backbone levels.

Read key information about the Internet and about the Backbone levels (Tier-1, Tier-2) of Internet.

- a) https://www.itgsnews.com/mapping-internet-maps/
- b) <u>https://en.wikipedia.org/wiki/Tier_1_network</u>



Pic. 1. First Internet Backbone – ARPANET.



Pic. 2. This Day Internet - many Tiers on Backbone

4.3.2. Backbone level of Internet.

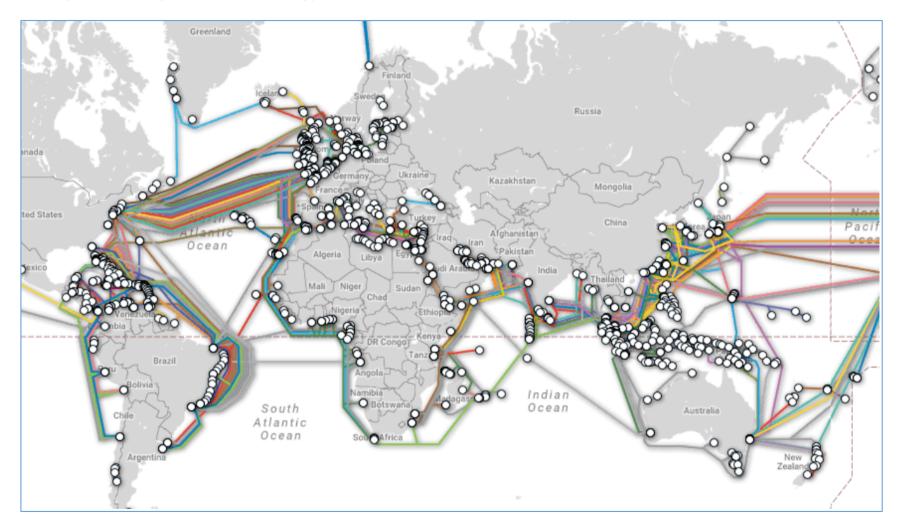
Read key information on site <u>http://he.net/3d-map/</u> about the Backbone level of Internet for Your Region (or Your Country, or Your City or Your Capital City) and <u>make Screenshots 1</u>.

(Also look the Tools on this resource https://bgp.he.net)



4.3.3. Submarine Channels of Internet.

Read key information on site <u>https://www.submarinecablemap.com</u> about the Submarine Channels of Internet for Your Region (or Your Country, or Your City or Your Capital City) and make Screenshots 2.



4.3.4. Data Center Certification, Standards and Compliance.

Read information about Data Center certification, standards and compliance ensure operational safety and continuity on site https://managementmania.com/en/data-center-certification-standards-and-compliance.

