



EDU services

NRENs and educational technology workshop

4-5. November, 2019, Budapest

by Dragana Kupres

Croatian Academic and Research Network - CARNET



CARNET – the institution

Started as a project in 1991,
founded by the Government in
1995.

Operating under the Ministry of
Science and Education



CARNET users

Institutions of HE
Public institutions
Primary and secondary schools
Student residence dormitories
Ministry of Science&Education
Ministry's Agencies
Students, pupils, teachers
600.000



Connectivity

1800 institutions connected on
3700 locations
Connectivity and services costs
for full-membership institutions
are covered by CARNET



CARNET members

Full members
Associated members
Temporary members

Computer security

- Content Filtering
- Vulnerability Scanning
- Abuse Service

Communication and collaboration

- Office 365 for Schools
- CARNET Medusa
- CARNET Video Conferences
- News

Trainings and consulting

- CARNET User Conference CUC
- Modern Technologies in Education – MTE
- Advisory and Educational Support for the Implementation of E-learning



Internet services

- CARNET Services for Schools
- CARNET Webmail
- CARNET mToken
- CARNET Web for Schools
- e-Citizens mToken

Digital education enablers

- e-Class
- e- Class Register for schools
- e-Class Register for Teachers
- e-Class Register for students and parents
- Loomen
- portal škole.hr
- e-Laboratory
- portal Nikola Tesla
- Edutorij
- Digital Educational Content
- Teaching Scenarios
- Services for e-Schools

CARNET connection

- Permanent Connection
- Individual Users Access to the CARNET Network
- Individual users access to the CARNET Network
- Mobile / A1 / Homebox CARNET
- CARNET 1D/2D/3D
- Iskon.CARNET
- O2CARNET / O3TVCARNET
- Tele2CARNET
- Stick2CARNET
- CARNET meter

CARNET services

Over 70 services such support of education and training, Internet connectivity, network and computer security, multimedia and user support.

- Services for CARNET System Engineers
- sys.virtual
- sys.voopIX
- sys.certificate
- sys.debian

What are educational services?



Computer security

Content Filtering
Vulnerability Scanning
Abuse Service

Internet services

CARNET Services Hosting for Schools
CARNET Webmail
CARNET mToken
CARNET Web for Schools
e-Citizens mToken
MSDC
Domains
Public server
Services for CARNET System Engineers ▾
sys.virtual
sys.vooplX
sys.certificate
sys.debian
sys.backup
sys.portal
Helpdesk for CARNET system engineers
(sys.help)

Communication and collaboration

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CARNET Sigma
CARNET Delta
CMS Classroom Management System

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Connectivity, security,
system eng. – not

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~~O2CARNET / O3TVCARNET~~

Tele2CARNET

Stick2CARNET

CARNET meter

- Trainings and consulting
- OER, open courses, repository
- LA
- Communication and collaboration

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National budget

vs

EU funded

(e-Schools – 200Me)

Loomen Stats

9.259 courses
5.755 teachers/designers
211.048 users

67.764 users from HE institutions
(students, teachers...)

13.284 users from K-12)

Moodle/Loomen e-learning tool

- CARNET provides Moodle, an e-learning tool, as well as a disk space and support for creation and maintenance of online courses
- Moodle mobile app
- Education for the use of moodle
- Massive Open Online Courses - Moodle MOOC etc.

LOOMEN (Moodle)

SERVICE LEVEL

National Portal for Distance Learning “Nikola Tesla”

Interactive online curriculum for secondary schools at tesla.carnet.hr (also on moodle)

Curricula for:

- Mathematics
- Physics
- Biology
- Chemistry
- English



OER,
open courses,
repository Edutorij,
e-Learning Laboratory

PROJECT LEVEL



Learning Analytics and Educational Data Mining Information System CARNET Delta

Srijeda, 30. listopada 2019. Osnovna škola OTOK 6.B (19-20) Dragana Kupres

DELTA NASLOVNICA PREDMETI CILJEVI OBAVIJESTI O ŠKOLI

Škola: **Osnovna škola OTOK**
Školska godina: 2019 / 2020

IZOSTANCI

5 Opravdani:	0 Neoprvdani:	5 Ukupno:
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4,3 Hrvatski jezik ▶

0,0 Glazbena kultura ▶

0,0 Matematika ▶

0,0 Povijest ▶

5,0 Tehnička kultura ▶

4,5 Informatika ▶

5,0 Likovna kultura ▶

0,0 Francuski jezik ▶

0,0 Priroda ▶

3,0 Geografija ▶

0,0 Tjelesna i zdravstvena kultura ▶

0,0 Engleski jezik (izborni) ▶

4,4 Ukupan prosjek ocjena

- measuring, collecting, analyzing and reporting on student records and their contexts for the purpose of learning comprehension and the environment in which learning takes place.
- used for predictions, personalization and interventions in case of assisting students, visualization of learning information and the creation of systems for predicting student success.

RODITELJSKI SASTANCI

	Datum	Prisustvo
1	30.09.2019	DA

CILJEVI

- Pročitati i napisati lekturu tjedan dana prije roka.

Ukupno 1

POSTAVI CILJ

EXPERIMENTATION (INITIATE LEVEL)

Governance of services

DECISION MAKING AND PRIORITISATION



Users' needs

Knowing and exploring users' needs

Previous projects: e-Islands, Schools 2.0, e-Schools pilot project

User events, research and evaluation

Feasibility studies



Organizational capacity

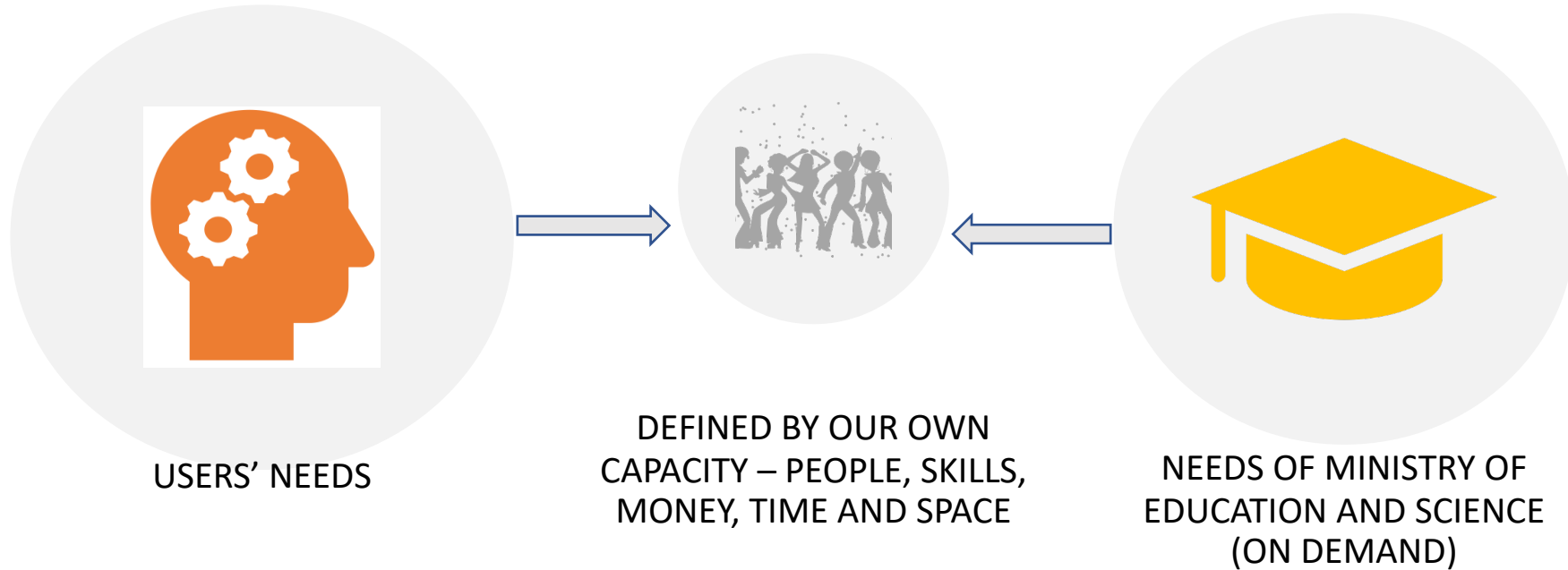
Defined by our own capacity – raising it:

Money, space, some people / skills

What money can't buy – time, some people / a lot of skills

Governance of services

DECISION MAKING AND PRIORITISATION



The need to produce and to procure is high!

Innovation
In-house
Skills & talent

Organizational aspects: production vs. innovation

How to manage the tension?
How to adapt and support both
needs?

