Distant learning of satellite navigation specialists in the Russian Educational Centre

JSC "Russian space systems", Moscow
JSC "Russian Space Systems" (legal successor of FSUE “RISDE”) is the leading enterprise of Russian Corporation of Space Device Engineering and Informational Systems

Leading company for GLONASS specialists training
Objectives: additional learning and training of specialists in GNSS applications

Main Courses

- GNSS Status and Development
- Applications of Navigation Technologies in Geodesy, Transport, House-building
- GNSS applications management

Russian Education Centre is created as the element of International Innovation Centre of Space and Navigation Technologies and Systems (IIC SNTS)
Who are the students? who will teach? financial support?

**RUSSIAN EDUCATION CENTRE**

- Russian Federal and Regional Programs
- Commercial education courses
- UN Educational Programs

Distant Learning will be the main learning form in Russian Educational Centre, respecting to the recommendations of ICG-4, WG C, September 2009

Feredal and Regional structures, Cadaster agencies...

Companies of the Corporation

Leading Russian Universities in the field of space and GNSS
### Why Distant Learning is so good?

<table>
<thead>
<tr>
<th>Distant Learning: some of the features</th>
<th>Wide geographic spread of the target audience</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Always actual training courses, considering the international information exchange</td>
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<tr>
<td></td>
<td>Large number of students and thus – good benefit</td>
</tr>
</tbody>
</table>
The Distant Learning System facilities are developed now in JSC "Russian Space Systems" commissioned by Roscosmos.
Automated Complex of Distant Learning (ACDL): Task and Functions

<table>
<thead>
<tr>
<th>The Task</th>
<th>The learning process organizing</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Functions</strong></td>
<td><strong>The collection of students applications, the formation of a training course</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Learning process planing</strong></td>
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<td></td>
<td><strong>Organization and maintenance of communications</strong></td>
</tr>
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<td><strong>Distant courses conducting</strong></td>
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<td></td>
<td><strong>Testing</strong></td>
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</tbody>
</table>
ACDL: Functional Scheme

Information-Analytical Complex (IAC)

Learning Centre Administration

ACDL

Administrative tools
The learning process organizing subsystem
Learning courses adapting subsystem
Interactive learning subsystem
Statistics subsystem

Technical and Methodical Supply (CSTMS)

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Distant Learning System: Information-Analytical Complex (IAC)

- Automated Complex of Distant Learning
- Complex of Scientific, Technical and Methodical Supply
- Information-Analytical Complex
## IAC: Task and Functions

<table>
<thead>
<tr>
<th>The Task</th>
<th>To plan the work of ACDL</th>
</tr>
</thead>
</table>

### Main Functions

| The requirements for specialists monitoring and analysis |
| Forecasting the requirements for specialists |
| The training results analysis |
| Supplying the distant access of users to the informational resources of the system |
The requirements for specialists monitoring and analysis subsystem

Forecasting the requirements for specialists subsystem

Training results monitoring subsystem

Capacity control subsystem

Forming the input data for training process subsystem

Web-portal

IAC Database

Internet

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Distant Learning System: Complex of Scientific, Technical and Methodical Supply (CSTMS)

Automated Complex of Distant Learning

Complex of Scientific, Technical and Methodical Supply

Information-Analytical Complex
### CSTMS: Task and Functions

<table>
<thead>
<tr>
<th>The Task</th>
<th>Automatic development of the training materials</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Main Functions</strong></td>
<td>Developing of the renewed study plans</td>
</tr>
<tr>
<td></td>
<td>Interactive multimedia libraries creation and support</td>
</tr>
<tr>
<td></td>
<td>Release of the standard base learning materials</td>
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</tbody>
</table>
Distant Learning System:
Leading Russian Universities

Moscow Aviation Institute

Moscow State University of Geodesy and Cartography

Bauman State Technical University
The use of Russian System of Distant Learning in UN educational curricula will help to:

- spread the information on GNSS systems more effectively
- promote world-wide use of GNSS applications
Thanks for your attention!