SALZBURG SEMINAR



Universities Project

Visiting Advisors Program

Ural State University Sverdlovsk Oblast, Russian Federation

June 14-18, 1999

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The Universities Project of the Salzburg Seminar Visiting Advisors Report

Ural State University June 14-18, 1999

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1. Introduction

- Under the auspices of the Salzburg Seminar's Visiting Advisors Program, a small group of consultants had the privilege of spending a week in June 1999 at Ural State University at the invitation of its rector, Dr. Vladimir Tretyakov. The group engaged the university leadership in a series of discussions on the following four general topics: 1) Ural State University and its Strategic Development; 2) The University and the Region; 3) The University Budget; and 4) Information Technologies in the Educational Processes and Management of the University.
- The university was very hospitable and generous in sharing of information. In the course of the visit, the team learned a great deal about Ural State University's strengths and the realities of its present difficult financial situation. While we were not able in the space of five days to gain a complete understanding of the institution, we were able to get a sufficient grasp to be able to make concrete suggestions that we hope will be useful to the university's leadership as it grapples with the challenges of a quickly changing environment. The team will be pleased to develop further the points which are summarised below, and to make available examples of good practice in other settings which might be helpful.

2. Strategic Development of Ural State University

- 2.1 The starting point of this discussion is from a recognition that USU is a classical university of consideration eminence and long tradition, located in a region which is very rich in higher education institutions and academies of Science. Unlike many other regions, it is characterised by a strong collaborative urge, which is an important factor in further developments. The prime interests of USU are the provision of high quality specialists for the region; basic research; and the enhancement of culture. It is a stable institution with a strong sense of community and conventional wisdom, and is reasonably comfortable with itself, and it position in the system, region and nation. Given the financial traumas of recent years, its strategic responses have understandably been defensive, but it is aware, at various levels, of longer-term opportunities.
- 2.2 The Rector provided a list of the perceived strengths of USU, with which the team would concur, and these include, inter alia
 - high teaching and research potential

- links with the academics of science
- excellent student entry, graduation and employment levels
- its role as part of an uninterrupted system of education
- a strong research base with demonstrable connections to teaching
- 2.3 The Rector indicated also a perception of the **weaknesses of USU** at the present time, which included
 - financial shortages and unpredictability
 - a limited capacity to respond to external possibilities
 - an inability to plan in detail beyond the very short term (a common issue in Russia)
 - a certain organisational inflexibility, which is currently being readdressed.

To these statements, the team would wish to add further weaknesses it perceived

- apparent absence of strong self-evaluation capacity comparative performance statistics (internal and external)
- considerable limitations in internal flexibility
- ageing faculty
- an embryonic international strategy
- not much history or interest in commercialization
- limited strategy to date: survival!
- 2.4 The Team with the University, identified a series of long-term global trends/agendas for higher education in 21st century, which the University would need to consider as part of its long term development. These emerge from various studies by UNESCO, CRE, the World Bank etc. and include
 - the advent of mass higher education based on increased participation rates and access to higher education
 - growing pressure by stakeholders and governments for the increased relevance of HE to world of work: changing careers. flexibility, competencies/skills; and the blurring of distractions between education and work
 - lifelong learning: adult/continuing education professional updating
 - a massive expansion in the production of knowledge and process of university access
 - the information/IT revolution
 - globalization: new markets, new alliances, new providers
 - the threat to traditional universities of new providers:

degree mills with dubious quality corporate universities based on large enterprises distance providers (open universities etc. using tech technologies) non-state universities These have relative advantages over traditional universities in terms of flexibility, speed of response and quality assurance techniques

The World Bank has indicated a change of emphasis from research

Mode A to Mode B basic applied single discipline academic transdiscipline user related

- and this has key implications for traditional classical universities universities and regional development: the expectation that universities will be major agents in economic regeneration
- 2.5 Some of these topics are already on the agenda of USU, and progress is being made. Others are not, and we would thus encourage the University to start the debate whilst there is good time to prepare adequate responses.
- When the Team discussed the strategic priorities of the University, reference was made to the 13 major objectives identified by Rector Tretyakov in 1998. These are far-reaching and cover various aspects of university life at various levels. Certainly, several are connected to the agendas outlined in para. 2.4, so the process of strategic thinking is well under way. However, we would recommend
 - that some of the topics in 2.4 need firmly placing on the USU agenda, especially

the shift from Mode A to Mode B research lifelong learning multi-national strategic alliances regional economic development

 that some of Rector Tretyakov's objectives probably need more detailed analysis in terms of means of implementation, timescales and phasing, and greater visibility across the university.

We discuss these later.

- 2.7 Finally, we would suggest that the process of strategic thinking and planning itself could be refined from now on, in the light of the above. Some elements for consideration include
 - better institutional analysis and assessment of performance
 - comparative consideration of the "health" of all departments across the university using comparable indicators relating to quality in teaching and research; efficiency; further prospects in employment terms etc. This would give a far better base for decisions on academic priorities, and hence, the most suitable focus for expenditure: distribution and redistribution of money.

• the means of deciding what to do with staff positions when the expected retirements of $\frac{1}{3}$ faculty takes place over the next 5-10 years.

The Team will gladly assist in providing examples of good practice in the above.

3. Ural State University and the Region

- 3.1 Universities are unique institutions with missions that differ from other parts of the educational system. In addition to the normal educational offerings, universities are expected to add to our base of knowledge through a variety of research activities. Indeed, the educational programs of universities reflect the research findings of the academic faculty. Good teaching evolves from good research.
- 3.2 However, unlike during the period of their origins, today universities cannot operate in isolation; they must make their contribution in the context of their immediate region, or nationally, or even internationally. The greater the quality of scholarship of a given university, the greater its reputation on the international scene. Thus, it is appropriate to explore the extent to which Ural State University interacts with these three different external communities.
- 3.3 The Sverdlovsk Oblast has a long history of economic importance, initially to the Soviet Union, and now to Russia. It represents one of the richest concentrations of natural resources to be found anywhere in the world. The quality of its development, beginning in the 1920s and 1930s, is coincident with the establishment of Ural State University in 1920, a close and important relationship that continues to this day.

To date, USU has thus a good pedigree in terms of its regional role, by virtue of the following

- it was founded with a clear regional mission
- it has spawned most of the other HEI and has co-operated well subsequencely
- it is regionally, rather than nationally or internationally focussed
- there is a strong vertical progression from Lycée through to Ph.D., and with good links with the Academies
- it is part of an effective Rectors' Council in many domains of cooperation and lobbying with oblast authorities and Moscow
- it is active in distance delivery.

In the light of the above, the current contributions of USU to the regional role are considerable, and we now enlarge on these.

It is obvious that Ural State University is a major educational resource in this part of Russia. The university prepares graduates who are highly specialized at the diploma. bachelor's, master's and doctoral levels. Ural State University, justly proud of its commitment to classic university education, not only produces well-qualified graduates; it also takes seriously its mandate to

contribute to the enhancement of knowledge. The latter is accommodated through research in the basic disciplines, conducted by the university's highly qualified faculty, academics in the Institutes, Academy of Science Members. Targeted research is also conducted in response to needs expressed by the many corporations and industries in this region of the Ural Mountains.

- Of real importance to the region has been the unusually high percentage of Ural State University graduates who have elected to work in **post-secondary institutions**, and in particular in institutions of higher education in the Sverdlovsk Oblast. Eighteen percent of all educators in the Oblast higher education system are graduates of Ural State University. This is a revealing commentary on the educational contribution of this single institution.
- Research has also enjoyed an enviable record. Prior to 1990, research grants worth in excess of \$6,000,000, were provided to academic units at Ural State University. Currently, because of changes in the federal priorities, the number of contracts has reduced dramatically to 50, an important factor in the financial difficulties facing the university. This situation was offset to some degree in 1998 by the 118 grants received by university scientists and scholars, grants provided by national and international funds and by various foundations. University scholars also contributed to 20 Russian research projects.
- 3.7 The university also contributes via **continuing education** to the region through its Centre for Part-Time and Extramural Education. The latter has 15 branches in towns of 6 regions and republics of Russia with approximately 2,500 "correspondence" students. As well, the university provides specialized courses for women, it operates the Institute of Management and Entrepreneurship, and it is responsible for the Euroasian College, the university affiliation in Noyabrsk.
- 3.8 Ural State University contributes to the **cultural richness** of the Sverdlovsk Oblast through such activities a conferences, special lectures and assistance to artists. Publications of a variety of kinds add to the wealth of the community. Expert advice is provided to municipal and Oblast leaders and to community organizations such as the local police.
- 3.9 Ural State University contributes to the **educational programs in the public schools** by having professors and staff visit schools that operate special classes. In-service for public school teachers is provided, along with the publication of school texts and manuals. Academic competitions, the Olympiads, are held for high school students and the computing and scientific lab facilities are also made available to them on campus. At present, the university has signed over 40 agreements on joint cooperation with public schools in the region.
- 3.10 It is obvious that Ural State University contributes in substantial ways to the well-being of the Sverdlovsk Oblast. It is also clear that the contribution is well appreciated. The question that now arises has to do with how Ural State University can enhance and extend its contribution at a difficult time.

All the above now has to be put in the context of a university in a region in severe economic decline. This is not an uncommon phenomenon in Western, Central and Eastern Europe and is often typified by

- structural decline in heavy industry
- high unemployment and reduced purchasing power
- low initial potential for research transfer from universities to industry
- a possible mismatch between university expertise and the needs of society
- financial shortages for HEI
- a lack of general confidence

The central challenge therefore, as we now see it, is how USU can help the Region regenerate itself, because this regeneration in these will have positive benefits for USU.

Two other factors are also relevant: the concept of globalization and world trade; and is the impact of information technology on higher education. All of these factors suggest to the Visiting Advisors that the university consider ways in which it can become more entrepreneurial, enjoy greater flexibility, identify additional efficiencies, and improve its financial base.

- In order to respond to the above, it is important for the university to analyze carefully the marketplace which it wishes to support. In the next phase, Russia probably needs to double its **enrollment in higher education**. This is so because increasingly the "currency of the realm" will be mindpower—the development of the region's human resources. As far as this is concerned, the University should consider
 - whether excessive academic specialisation in bachelors' degrees is likely to be helpful in the long term for flexible employment prospects and job mobility, and ...
 - whether generic competencies and more multi-disciplinary studies should be developed
 - whether opportunities for students to take courses at various HEI's are sufficiently flexible.
- One of the areas of future potential for Ural State University, in our minds, is **Continuing Education**. While the university is active in this field, we are of the view that the university should
 - scrutinize carefully new regions, new populations and new age groups that could benefit from the university's educational services.
 - consider forms of delivery other than face-to-face instruction.

The evidence is quite clear that individuals are quite capable of learning by television, teleconferencing, internet, satellite and the like, and especial attention should be given to older students (mature students) who have missed the opportunity to obtain a university education and who could make a greater

contribution with one. Combinations of face to face and electronic instruction seems the way forward. Thus, strategic alliance with a good international ODC provider could be advantageous.

- Another area of opportunity relates to the research and development activities of the university. The loss of military contracts was devastating and every effort must now be expended to replace the lost resources. Identifying opportunities for contract research typically takes entrepreneurial activity on the part of a university. Steps here might include the following
 - personnel could be deployed to go out from the university into the community, actively seeking out opportunities, providing information about the strengths of the university, and promoting individual faculty members' research competencies
 - greater attention might be given to creating spin-off companies from the university to encourage new indigenous industry.
- Limited in potential at present, is the area of **charitable contribution**. Given that there is no tradition for this type of activity, there will be challenges associated with this suggestion. However, the university has received various forms of "in-kind" contributions and these may be enhanced if a concerted effort is made. The concept of actual financial contributions for specific purposes of importance to a donor should be explored. We recognise here that changes are likely to be needed in tax legislation at a Federal level to encourage enterprises and private donors. This is a long term prospect, but should be started soon.
- 3.15 The good relationships of Ural State University with the other institutions of higher education the region and Oblast government should be exploited in initiating cooperative ventures with them, individually or collectively. Resources being as scarce as they are, there may be educational programs or research initiatives that may be undertaken collectively that are not possible on an individual institution basis or may be undertaken more efficiently. This is related to
- 3.16 The role of the USU with other partners in assisting inward economic investment, by
 - producing an expertise directory
 - "selling" the region internationally as a big potential growth point to external companies
 - setting up a joint IP/patent office

This is a significant, but probably important new role.

4. The Financial Situation and Its Implications

4.1 Elements of existing financial situation are well known to all so there is probably no need to elaborate beyond observing that

- the budget situation is depressing and the Team has considerable admiration for the way in which USU has coped so far
- alternative sources of funding are critical
- the vagaries of federal funding are discouraging and unfortunate and in the long term dysfunctional for Russia, but we understand fully the issues involved.

4.2 As far as **Income issues** are concerned,

- university has done a commendable job of attracting income from sources other than the federal government
- it had impressive increases in tuition fees
- the process of bartering for services has been an enormous success, and the technique has been brought to a fine art!
- the university doing well in spite of a severe set of constraints and regulations

Based on our discussions, a series of suggestions follows on alternative sources of income, which the university may wish to consider, with, of course, the caveat that USU colleagues will appreciate the feasibility of these far better than the Visiting Team.

- Expansion of the Masters' degree programme is considered to be a good possible source of income if fees are set at a level to guarantee a profit. However, some conditions are necessary:
 - market surveys are needed to identify areas of likely demand.
 - who delivers and by what means?
 - the University would need to ensure staff were competent in adult, non-theoretical learning processes
 - USU would need to develop masters' degrees that satisfy the career needs of mid-career people e.g. MBA how does it reorientate its programme?
 - USU might consider the offer of masters' degrees on the work site, using technology, but this again, requires considerable thinking through.
- 4.4 Encouragement of students to select a **second degree option** e.g. adding a minor degree to the major selected. Potentially, this is useful, since it
 - expands the marketability of the student
 - increases the likelihood of encouraging the student to extend his education
 - provides important additional financial resources to the university
 - adding a foreign language may be very important

How far this is possible within the existing academic regulations would need to be considered.

- Research and development activities at Ural State University is important since the serious effort made to replace at least part of the revenue obtained from this source, prior to the change in federal priorities, has only been partly successful. We would encourage the University to
 - survey the external market for potential R & D consumers
 - complete an inventory of research and development capabilities at USU and make the appropriate contacts
- 4.6 Related to this, USU should make a concerted effort to protect the **intellectual property**, appropriately the domain of USU and its employees, since
 - given the academic reputation of USU, there are undoubtedly intellectual properties that have considerable market value
 - such products are rightfully the property of the developer and his or her sponsoring institution
 - the concepts of copyright and patent are widely recognized in the Western world

We understand no legislation exists on this points; thus the Ministry of Education and any other appropriate ministry should be lobbied on behalf of the university community to provide such legislation: it is in the national interest.

- 4.7 USU should make a concerted effort to recruit larger numbers of international students, since
 - foreign students enrich the program of regular students at USU
 - foreign students, upon completion, return to their native lands as advocates for USU and for Russia
 - foreign students become advocates on behalf of the Sverdlovsk Oblast
 - foreign students often are decision-makers upon return home
 - foreign students are sound income earners for the university with relatively little extra cost.
- 4.8 **Sound business practices** need to be noted:
 - important to ensure that sound costing and pricing policies are practised
 - incentives should be provided for departments and faculties where appropriate to generate additional income
 - global budgeting is necessary instead of line-item budgeting, and lobbying with the Federal government is necessary for this purpose
 - use of the Rector's discretionary funds as investments in moneygenerating initiatives (have to spend money to make money) (fund raisers, contract raisers, etc.
- 4.9 A thorough review of the **cost-effectiveness of existing expenditures** is worthy of consideration by the administration of USU e.g.

- cost-benefit analysis of all specialisations
- a reduction of course duplication across all faculties (statistics, economics, management, etc. inefficiencies are costly)
- elimination of the more extremely inefficient programs or classes they cannot really be afforded, unless they are of really high status.
- reduction of the curriculum offering, consistent with quality standards and the Ministry of Education requirements
- movement of more responsibility for learning to students, thus reducing the volume of faculty supervision of their learning (self-directed in the library, on the Internet, etc.)
- if new programs or courses are added, USU should consider carefully what should be dropped to accommodate these.

5. Issues in Academic Development

- Ural State University's academic base is considerably more solid than its financial base. Despite several years of inadequate and unstable funding, USU has managed to preserve a great tradition of excellence in teaching and research and has maintained a good record in student admissions and employment. The challenge now is to steer the university's academic development in directions that are sustainable and reflect the realities of a quickly changing market economy.
- 5.2 As far as Degree Programs is concerned, the university has already taken steps forward in several areas, including the introduction of innovations in the structure of the degrees it grants. The present system could be described as a hybrid one, in which certain fields continue to grant the traditional Soviet-era diploma after five years of study, whereas others have switched to a 4-year bachelor/1-year master degree program, along the lines of common practice in West Europe and North America. It is the recommendation of the advisory team that Ural State University switch all fields to the bachelor/master system for three primary reasons
 - one system is easier to administer than two. Confusion about the relative value or substance of the various degrees awarded by the university can be avoided if there is one unified system.
 - the 5-year diploma should be eliminated because it is unique to the post-Soviet sphere, and is not widely recognized beyond its boundaries. Granting a degree that is widely understood abroad will help graduates to exploit employment and study opportunities in West Europe and North America.
 - a split bachelor/master program allows students more flexibility in choosing specialisations after becoming closely acquainted with a subject. The first four-year degree can be a broad, liberal education intended to develop basic skills and familiarize the student with the field, whereas the masters degree can be devoted to advanced exploration of a particular branch of knowledge.

- 5.3 The advisory team believes that the introduction of **modular courses**, along the lines practised in much of Europe and all of North America, would considerably assist USU's future academic development, for several reasons.
 - modular courses are a pre-requisite for credit transfer between faculties or institutions. Without standard, discrete units of measurement of coursework completed, students sacrifice progress and have to start an entire course of study over again when they switch institutions, except in the rare case when they transfer to an identical specialty in an identical faculty in another institution of the same profile (of course, there is little justification for such a transfer—if the programs are the same, why switch institutions?).
 - modular courses will help to eliminate duplication of instructional effort across faculties. Under the present system, for instance, economists take English language classes separately from physicists. There is no disciplinary reason for this duplication, as the English language is the same irrespective of the faculty of the student. Modular courses, in which students studying the same subject work together regardless of their specialty, will allow the university to realize efficiencies and reduce instructional costs.
 - modular courses allow students more freedom in planning an individual program of study. Rather than undertake a prescribed program as a member of a permanent group whose composition remains constant, students can take courses on an individual basis.

Ural State University is to be commended for its efforts to develop part-time and distance education in three primary directions:

- the system of part-time education, in which students are able to combine theory with practice;
- the remote branches, which bring USU's high-quality instruction to communities outside Yekaterinburg;
- and the new electronic delivery mechanisms, which represent a significant means of instruction for the 21st century. The advisory team affirms that the university is moving in the right direction in developing these areas, and would like to point out some issues for consideration as it moves forward, to supplement these mentioned in paragraph 3.12.

To these very significant developments the Team would make the following observations:

traditional universities throughout the world are apprehensive about the possibility of being marginalized by rapidly developing new means of communication and resultant competition. The strengths of USU, in fundamental and applied research, in broad education and professional training, will always be useful and exploitable in a regional market economy. The Internet and other technologies are simply delivery mechanisms, and cannot replace the knowledge and understanding of a professor or researcher. Success in the new environment requires that

the university maintain its strengths while exploiting the new mechanisms that will allow it to deliver education more efficiently and widely

- while new technology does not replace the teacher, it does require new skills for successful development of curriculum. The team was impressed by the productivity of Ural State University's existing team of six technology specialists responsible for web-based publishing. As the university increases the on-line share of its publications and instruction, the need for more specialists becomes clear. The advisors suggest that a way to avoid the cost of hiring additional personnel is to make such work part of the responsibility of existing teaching and publishing staff. Doing so requires additional training, and pushes the university to make choices among different delivery mechanisms, rather than duplicate efforts among several.
- revision of instructional materials becomes easier with the technology of distance education. The swiftly changing nature of many fields, in fact, necessitates frequent revision. The practice of many universities has shown that it is reasonable and advisable to update curriculum once every three years. As technology evolves, it would be wise to upgrade software and hardware at approximately the same interval. Therefore, launching a distance education project cannot be a one-time event, but rather requires ongoing investment of time and resources. Planning for this expenditure should be built into the project from the beginning.
- development of technology-based distance learning projects can entail a considerable investment of resources. To realize such projects, Ural State University might consider cooperative delivery of distance courses through a consortium with other institutions in the Sverdlovk region. The Rector is currently the chair of a multi-university working group that is coordinating the development of Yekaterinburg's information technology network, an extremely important effort. This group focuses on building the infrastructure; we recommend expanding the scope of discussion to include projects for curriculum development. Such joint work can benefit all the universities involved by eliminating duplication of effort and realizing efficiencies of scale.
- in a rapidly changing world, the traditional model of four to five years of study, followed by a forty-year career in the same field, as practised by USU, may no longer adequate. In order to stay current, workers must acquire new skills and knowledge nearly continuously for most of their working lives.
- so-called "non-traditional" students, those who are older than traditional students or attend classes part-time, are likely to become the majority in Russia over the next 15 years. USU should therefore recognise that the motivations and agendas of adult mid-career students are likely to be different from conventional students, and thus new pedagogical forms will be needed, to capitalise on their motivation and life experience.
- there are considerable implications for course design, credit structures and assessment procedures which USU is advised to reflect on.

- 5.5 **Elements in further academic development**. The advisory team recommends USU begin to conduct analysis of the market potential for all of its programs of study, but especially for those new programs it proposes to open.
 - this analysis should be a part of a broader, university-wide effort to develop the systematic, ongoing analytical capacity that is necessary to inform the management process. Such analysis might begin with a formal survey of the needs of the Sverdlovsk economy, both presently and in the future. For the purpose of this analysis, the economy should be broadly defined to include not only the region's traditional heavy industry, which has declined significantly in the last ten years, but also developing small and medium-sized enterprises (which may become large enterprises in ten to twenty years), the embryonic non-commercial sector, and the government sector, which is experiencing a shortage of trained, professional administrators.
 - the desires, aspirations and opinions of USU's prospective students should be factored into the university's analysis. Prospective students are not experts in their fields, and they expect the university to take the lead in designing programs and preparing them for the future. However, they are acutely aware of what careers are most promising for the future needs of society, as they are uninsulated from recent changes in society and able to adapt quickly to new realities. Further, they are the ones who will ultimately decide in which field to enroll. Regardless of what priorities the university sets for academic development, the students will determine the popularity of any particular field. So, although the opinion of prospective students should not be the deciding factor in the analysis, it should be a priority. The university must strike a balance between reflecting the demands of students and providing the academic leadership that they require.
 - USU's alumni should be surveyed systematically to determine their statistical rates of success in job placement and advancement according to faculty and specialty. They should also be surveyed to discover which particular skills and knowledge obtained at the university proved to be of most practical or long-term benefit.
 - the quality of the academic process should be examined continuously, both in terms of the consistency of actual practice with the established norms, and in terms of concrete results of the educational process. Such results analysis should not be limited to measurement of knowledge gained, but should rather determine what lasting benefit the accumulated knowledge brings to the student.
 - finally, the university should be prepared to modify, open or close programs in accordance with the findings of this analysis. Beyond being an exercise in developing understanding of the academic process, the analysis should serve to inform specific decisions taken by the university's leadership.

6. International Strategy

- 6.1 The importance and reputation of a university is typically defined on the international scene and it is thus important that USU establish its credentials internationally, since international reputation attracts students, faculty and resources. Specially for USU in its particular situation, it is important that
 - international reputation attracts cooperation initiatives (exchanges, joint research, etc.)
 - engaging on the international scene ensures expertise and money for regional renewal
 - international reputation enhances the development of the civil society goal

The team feels that whilst USU has taken some important steps, it is still seen primarily in the regional context and tends not to think nationally or internationally. We thus would identify a need for greater involvement with external experts, to assist with, for example, the modernization of Russia's public administration, and to ensure that curriculum is as current as possible. Some dimensions of an international strategy for USU are now explored.

- 6.2 **Student mobility** is of importance to USU, since foreign students incoming; bring currency from elsewhere and different perspectives, USU student outgoing will return with a broadened experience. In addition, foreign students upon return to become ambassadors for Russia if the experience is good. Particular actions of importance for USU would thus seem to be
 - securing work placements in foreign settings in conjunction with partner institutions.
 - a redesign of the credit structure in line with the European Credit Transfer System
 - a concerted marketing of the region and its HEIs (in a consortium)
 - a careful evaluation of western institutional partners in the light of these goals and the creation of new partnerships where it makes sense.
- Regarding the development of **new technologies in educational delivery**, we are concerned that USU has partners who do not exploit USU financially, and who are ready to accord USU a fair share of any profits. This should be looked at carefully.
- Reference has already been made to international connections which facilitate research and visibility internationally. Here, USU should
 - define the criteria of importance to USU is establishing international linkages
 - review the relatively modest 9 current agreements as to appropriateness and effectiveness
 - select potential partnerships that will enhance USU further.
- 6.5 As has been mentioned, USU and partners should use international connections to solicit inward investment. This would mean

- initiating a partnership with an EU university in order to attract EU funds
- utilising the EU partnership to develop bids from EU Fifth Framework and Small and Medium Enterprises

In this regard USU needs to develop an information system that makes available international funding possibilities

The Capacity of the Urals State University for Change and Development 7.

- The previous paragraphs have demonstrated the feeling of the Team that there 7.1 are a whole series of driving forces for change, both internal and external, quite apart from the recommendations made by the Team. It is equally apparent to us that there are a series of forces which are acting against change, again, both internal and external, and it is important that these are worked on and progressively removed, to ensure that progress is solid and sustained, rather than sporadic and patchy. We discuss below briefly some key issues for the consideration of the University, deriving from our previous discussion.
- Clear Strategy and directions for change at USU. This calls for 7.2
 - a vision of type of university for 21st century on regional, national and global stages
 - explicit shared public priorities, supported by instruments, resources and commitment
 - a strategy which builds on existing strengths which are relevant to external opportunities.

Some progress has certainly been made in elements of this.

- Internal flexibility is considered essential to react quickly, seize opportunities 7.3 and shift short term priorities. We have made reference in previous sections to
 - credit systems
 - variable curriculum delivery (attendance, locations, media)
 - means of crossing discipline and department boundaries: effective use of resources; multi-discipline combinations...

Project management Matrix organization

- flexibility in personnel
- good quality processes and means of improvement: learning from mistakes
- good use of rectors' development fund to initiate new schemes
- flexibility in the use of the budget

There will be others, but these are particularly relevant.

An university personnel policy to meet the challenges outlined. Certainly, 7.4 USU has very high quality staff. but we do observe:

• an unfavourable age profile: 1/3 in the 55-65 age group

This raises issues of policy on replacement of leaving staff; redistribution of posts; and planning for the next generation of leaders at various levels.

• an unfavourable rather limited perspectives in experience : most are Yekaterinburg in origin and we would thus recommend priorities in :

sabbaticals for updating; travel budgets; attracting non-USU staff:

and foreign visitors as means of broadening this expertise.

• there are a whole lot of potential new tasks, for which there is limited internal experience in commercial area, distance education etc.

This raises issues of whether there are existing staff to undertake these roles – as happened in distance education; whether external expertise can be acquired; and whether the faculty training programme needs urgent looking at.

- there is no formal policy on staff incentives, in which USU is not alone! However, moving staff into new domains does mean consideration of this.
- 7.5 External stimuli to change need to be built into USU's system, since these are often the most effective ways of sustaining change. Here, we see the following as being of particular importance:
 - consortium activities
 - international connections
 - external evaluations through academic peers
 - 'stakeholder circle': permanent forum of regional development

and commend USU to develop them further.

- 7.6 Effective political lobbying on Government is considered necessary to remove system problems e.g.
 - tax laws
 - intellectual property legislation
 - strict budget rules

USU is well aware of this, and we wish them well.

- 7.7 Finally, we feel USU should consider the main elements of an entrepreneurial university which need to be put in place to complement classical university structure e.g.
 - a clear strategy

- flexibility
- budget incentives
- multiple income streams
- core stable academic organization structure... the faculties, which cooperate with each other.
- satellite quasi-commercial organizations

CE center consultancy technopolis spin-offs R & D centers

- consortia and alliances regional and international
- specialist expert market-related academic and administrative staff in market-related units
- vice-rectors with <u>external</u> portfolios
- culture of devolved responsible decision making and initiative taking within broad frame

8. Conclusion

This visit, for us, has been professionally most stimulating, and we hope that the above reflections will be helpful to the University, both in terms of the content and the spirit in which they are offered. We are confident that the University has the capability of picking up these and other challenges as it has done in the past.