"…. Go East, Region 8, Go East …"

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Abstract — **The development of IEEE activity and formation of new Sections and Chapters in Central and Eastern Europe following the fall of the "Iron Curtain" and the dismantling of the Berlin Wall is outlined, from the personal perspective and experiences of the author .**

Index Terms — IEEE History, IEEE Region development, IEEE Membership.

I. REGION 8 ACTIVITY IN EASTERN EUROPE

Of course, Region 8 (R8) did not literally expand its boundaries after the dismantling of the Berlin Wall and the fall of the "Iron Curtain", and neither John Soule nor Horace Greeley were around to rephrase their alleged quotation "Go West, Young Man" [1]. However, the reality was a very large increase in Chapters, Sections and active IEEE volunteer members, including students, in the countries of Central and Eastern Europe over the period from 1990 to 2008. IEEE membership numbers there have not increased to the same extent, which is especially notable in the former Soviet Union even in locations where there are very large numbers of engineers and scientists.

In what follows, 'Eastern Europe' is used to describe all countries in the Eastern part of R8 which had Communist governments, including the Soviet Union and the somewhat independent ones, such as Romania and Yugoslavia.

II. MY QUALIFICATIONS TO DESCRIBE THE EXPANSION

After many years of varied activities as an IEEE volunteer, I became involved in the following positions:

> R8 Circuits and Systems Chapter Coordinator and Chapter Coordination Subcommittee Chair
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> R8 Vice President of Circuits and Systems Society
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> R8 Vice President, Technical Activities
>
> R8 Director

as well as membership of the IEEE Transnational Committee (including being its Chair). I had been involved with conference organization and chapter activities for some years, but my first experience of the R8 Committee was in Eindhoven, in Spring 1978. I was invited to be a member of a student paper judging panel in Eindhoven, so could attend as an observer. The R8 Committee was small enough to easily fit around the table in the Philips Company Boardroom, and the friendship and cooperation between the Section Chairs of many nationalities (including Poland and Israel), left a permanent and favourable impression upon me.

At that time, the R8 Sections were mostly in North-Western Europe and activities were predominantly 'managed' from the UK (for example, for many years, the Secretary, the Editor of R8 News and several other senior officers were from the UK, and held positions that were, in effect, not subject to regular election processes).

New Bylaws adopted in 1997 provided a structure of elected officers with generally well-defined procedures for nominations and elections, in a pattern and structure which is very similar today.

III. ACADEMIC LINKS BETWEEN EAST AND WEST

A. Before the fall of the "iron curtai"

Because 'Western' journals were generally not available in the 'East', it was usual for authors to receive reprint-request cards from researchers and academics in the 'Eastern' countries, and by receiving these, from the mid 1960s, I gained some familiarity with major universities, research institutes and some of their members in such countries.

In 1971, I had a big involvement in planning an IEEE international conference in London, which not only gave me long-lasting personal links with many people working in my research-field, but also brought me into contact with a large contingent from Hungary among the delegates. Hardly any others came from Eastern Europe. However shortly after, I made my first visit to Eastern Europe, to a Summer School at Talé in the east of Czechoslovakia, and there I met many participants from various of the Eastern European countries, including Russia, who were generally not allowed to visit Western Europe.

These provided me with many personal contacts among academics in Eastern Europe, which were strengthened by the practice of The British Council to fund exchange-visits between UK universities and universities and research institutes in Eastern European countries. As a visiting academic, and not a salesman, diplomat or spy, I could easily meet the families of academics, form friendships, better understand their situation and bypass some of the 'formalities' imposed by politics.

Photocopiers were generally not available in the 'East' or were under the strict control of the 'state' – so the possession of photocopies of official documents tended to confer greater status and respect on a visitor than possession of the originals.

From 1979, I made several visits to Hungary.

Among my 'connections' was one with the Dresden Technical University, which had a formal agreement for cooperation with the City University in London which involved short exchange-visits of academics in each direction. There was no IEEE involvement in this, but I saw that once the end of the GDR (East Germany) occurred and its extreme travel restrictions had ended, there was good scope for starting IEEE Chapter activities and IEEE events in the area.

B. After the fall of the"iron curtain"

My links with various academics in Eastern European countries (particularly at Dresden Technical University, Kaunas Technical University and Budapest Technical University) led me to expect that from 1990, there would be many more 'exchanges' of academics and graduate students and post-doctoral workers, to be a welcome addition to research teams in UK universities. In reality, there were fewer such visits than I expected, partly because of the relatively high cost of living in the UK.

At an early stage, the European Commission provided funds to enable universities in EU countries to form partnerships with universities in Eastern Europe, with the aim of providing curriculum updating and the provision of improved modern laboratory equipment and facilities (the TEMPUS programme: "Trans-European Mobility Scheme for University Studies"[2]). Although interesting for the academics involved, this was not very attractive to the 'managements' of UK universities, because the overheads provided with these grants was very small, the paperwork was very labour intensive, and at the same time, UK universities were under new and strong financial pressures to maximize their incomes, reduce their costs and operate in a more 'commercial' way.

However, for the projects which were accepted, this provided (for the electrical, electronic and computer fields) a good opportunity to promote and encourage IEEE activities in Eastern Europe universities.

Prior to all this, there was a 'tradition' of annual joint workshops (in the electrical circuit theory field) between the Budapest Technical University, the Czech Technical University (in Prague) and the Warsaw Polytechnic.

Because of my familiarity with some academics involved in the organization of these workshops, I felt that there was an excellent basis for applying for a TEMPUS project involving all three institutions (with Delft University of Technology and King's College London as the 'Western' partners). We worked on the proposal documents during the 1991 Polish-Czech-Hungarian workshop on Circuit Theory at Göd, near Budapest.

Unfortunately this attempt was not successful: we had failed to appreciate that success required approval of the 'Eastern countries' national TEMPUS offices as well as the European Commission, e.g. success required approval by authorities in Hungary AND Czechoslovakia AND Poland AND Brussels. It is clear that getting approval by all of four agencies is difficult and not as easy as for only two. Having learned this, we submitted a new proposal involving only Warsaw (with Delft and London) and this was successful.

However the added personal links established did enable me (and others) to make 'IEEE connections' with events and people in all of the above countries, and I think helped to ease the spread of IEEE Chapters, and the IEEE financial and publicity support for conferences and workshops. Particularly that was the case with the Circuits and Systems (CAS) Society subject area, because at that time, the Society had ample (and growing) reserves and being R8 CAS Vice President helped me to get approval to support various events in Eastern Europe.

This included the Technical University Iaşi, in North-eastern Romania, where a CAS Chapter and a CAS student branch were formed and an annual international symposium 'SCS' (Signals Circuits and Systems) was supported.
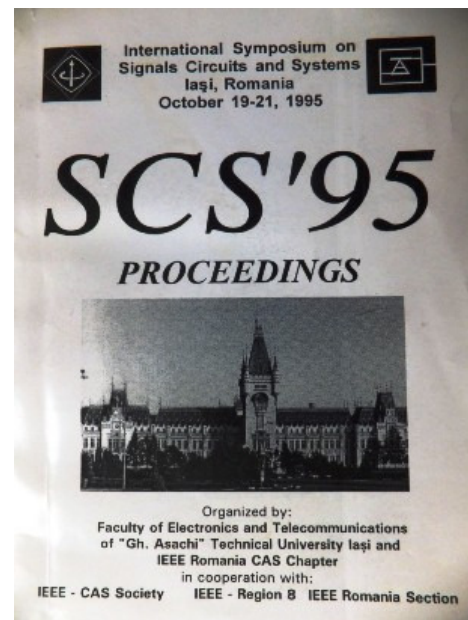

Figure 1.   Proceedings of SCS Symposium

At the same time, good links with the Polytechnic University of Bucharest arose, and of particular note is the remarkable success which their students have had in the worldwide IEEE Computer Society International Design Competition (CSIDC). Their student team came first in 2002, second in 2003 and 2004, and third in 2005 and 2006.

The SCS symposium continues, with the 10th held at Iaşi in June 2011, still organized by the Faculty of Electronics, Telecommunications and Information Technology of the Technical University Iaşi, the IEEE Romania Section & CAS Chapter, in cooperation with the IEEE CAS Society. The two co-chairs are one from Iaşi and one from California.

What I believe to have been the first IEEE event in the territory of the former GDR (East Germany) was run jointly by the UKRI CAS Chapter and Dresden Technical University. This was a two-day international workshop, Non-linear

Dynamics of Electronic Systems (NDES) in summer 1993, arising directly from my joint research activities with a 'Chaos' group at Dresden. It was held in Schloß Eckberg, a magnificent location high above the River Elbe, a place which would surely be unaffordable now. We expected it to be a 'once only' event, but in reality, it has continued on an annual basis ever since, moving around the world, to Kraków in 1994, Dublin in 1995, Sevilla in 1996, Moscow in 1997, Budapest in 1998 and, after many other venues, eventually returning to Dresden in 2010.

The 'rules' of IEEE as promulgated from Piscataway do not like Sections or Chapters arranging events outside their geographical boundaries, and this is one example of the inappropriateness of such rules for R8, being just one of many international events in R8 outside the UKRI Section which were initiated within the UKRI Section by its IEEE Chapters.

Figure 2.   Proceedings of NDES'93

IV.   IEEE IN THE EAST BEFORE 1990

The Poland Section was established in 1972, and the Poland Section Chair was able to attend meetings of the R8 Committee.

Currencies of the Eastern Europe countries were not generally exchangeable for US dollars or any of the Western European currencies, and where conversion was allowed, it was at artificially designated exchange rates, sometimes dependent upon the class of transaction. For example, between British Pounds and Czechoslovak Crowns, there were two distinct rates in 1971 – one for commercial transactions at about 1:19 and one for tourist and personal visits at about 1:38. Conference visits could be in a not-well-defined category, which could result in uncertainties over which to use. Commonly Western currencies could be taken into these countries without restriction, but had to be immediately changed to local currency, which could not be converted back again. Even between the Eastern European countries the movement of their own currencies was not allowed – for example, when travelling between Czechoslovakia and East Germany, it was forbidden to carry any of their currency across the border in either direction – even though it was commonly done. While this may seem extraordinary now, it should be remembered that such restrictions were not only in the Communist countries. For example, until 1974, British citizens who made trips abroad could normally take only a strictly limited amount of foreign currency with them, and were supposed to convert back to sterling any that they brought back unused. It was also forbidden for them to open or maintain foreign currency bank accounts abroad unless there were approved business reasons for doing so.

In the case of Yugoslavia, IEEE operated a blocked-currency account: membership dues could not be transferred to USA, but an arrangement was made to keep the funds in Yugoslavia. This money was then used for IEEE visitors to the country – for example to attend conferences, in which case the registration and hotel costs were paid from the blocked currency account. One R8 Committee meeting was held in Dubrovnik (in autumn 1974) to use some of the money in this account. Internal transfers within IEEE could then be used to 'balance' the external accounting. The net effect, of course, was to bypass the blocking of financial transfers out of Yugoslavia, to the benefit of all concerned.

The Hungary Section was formed in 1987, and the R8 Committee held a meeting in Budapest in April 1989. However, this reflected the impending political changes and the process of liberalization which was already under way in Hungary, and should be regarded as part of the developments leading to the dismantling of the Berlin Wall. Notable events of late 1989 included the opening of the Hungarian border with Austria to East Germans wishing to travel to Western countries, which rendered the Wall ineffective.

Although the Romania Section was not formed until 1990, it had the status of a 'Section in Development' for some years before that, during difficult times, and was visited by the R8 Director of the time, Basil Osborne' in the mid 1980s, to try to provide assistance.

V.   FIRST STEPS AFTER THE CURTAIN FELL

There was a campaign of the UKRI Section to supply surplus IEEE Journals to needy universities in Eastern Europe – for which there were successes and failures. It was not difficult to collect large donations of unwanted journals, but shipping them to a destination in Eastern Europe was another matter! The cost was very high, and there was no assurance that they would reach their destination. It is known that some of the journals were successfully received, but in a number of cases (for example, going to Albania) there is no information of them ever being received. IEEE members taking a few

copies to conferences and giving them away was successful but of course could have only limited impact.

A major and lasting success was an initiative primarily from the IEEE Electron Devices Society to establish Chapters in the Eastern European countries by paying the membership dues of a sufficient number of people to enable a Chapter formation petition to be signed and submitted. This practice of subsidizing membership spread particularly among the Societies of IEEE Divisions I and IV. It was associated with a sequence of Region 8 Chapter Chair meetings, to which the Chairs of these new Chapters were invited, with travel funds provided. Generally these Chapter Chair meetings were held at the time of a major annual conference in R8 of one of the participating Societies, so that for an affordable small extra cost, the Chapter Chairs could also attend the conference and meet a huge range of participants. This provided an extra incentive for them to attend the Chapter Chair meeting and learn about how to run IEEE activities, etc. The Microwave Theory and Techniques Society was very active in this initiative and still holds such meetings.

This led to several similar Chapter Chairs meetings for other Societies being initiated by the R8 Committee (for example, one for Signal Processing Chapter Chairs alongside the ICASSP in Istanbul, Turkey in June 2000).

Reimbursing expenses was often a problem in the early years of this activity, because at that time those from Eastern Europe generally did not have credit cards, and in some of the countries, personal bank accounts were not allowed.

Moreover, there was a risk of payments transmitted to them in their own countries being treated as income and taxed at a very high rate and/or this might raise suspicions about the source and reasons for such foreign payments. It has to be remembered that most of these recipients had recent memories of living in regimes where long interrogations in unpleasant environments could be initiated for undisclosed reasons, and so there was a strong preference for receiving expenses as cash (preferably US dollars) handed over to them in the street or other 'anonymous' places. The 'collapse' of local currencies in their home countries sometimes meant that their personal savings had effectively disappeared.

The limited funds of most of these visitors made many of them very cautious in accepting invitations to dine in local restaurants with other IEEE colleagues. They realized that equal sharing of the cost of the meal might be expected, and feared that might be unaffordable for them. Being reluctant to admit this, they typically made some excuses such as 'not feeling hungry'.

The generous subsidy programme and the Chapter Chair meetings were, in my opinion, a great success and a big catalyst in enhancing the development of IEEE activity and encouragement of R8 Chapter and Section formation.

The opportunities for these Chapter Chairs to travel and to attend the conferences, etc. resulted in a number of them being unwilling to hold elections for their successors, and in a few cases, it was clear that they also were motivated by a wish to find a well-paid job in the 'West' to escape from what were often very poor salaries and working conditions in their home country. Whether IEEE should be proud of enabling academics to leave their home countries and emigrate for short or even permanent positions in Western Europe or North America is perhaps a matter of uncertainty.

A. The particular contributions of the R8 Committee

R8 has a Voluntary Contributions Fund (VCF) derived from optional payments made by IEEE members at annual membership renewal. This provides support for students and members from low-salary countries to attend conferences in R8. Academics from Eastern Europe were eligible because of the generally low salaries which they received for a number of years after the dismantling of the Berlin Wall. It thus provided help to a number of people who could have influence on the development of IEEE in Eastern Europe.

Many IEEE volunteers in 'Western' R8 had information about and understanding of the situation in Eastern Europe, and of the geographical, cultural and linguistic framework. This was generally lacking among the IEEE staff in USA and also among many senior volunteers in USA. As a result, the R8 volunteers could provide guidance and leadership which could not be provided from USA.

As a small example, when I was reporting in 2003 to the IEEE Board of Directors about my activities in R8, I described my visit to a conference in Crna Gora, where I had given an invited presentation about IEEE. I suspected correctly that the members of the Board would have no idea where Crna Gora was, and also would be too shy to ask. At breakfast the following morning, I asked the most senior member of the IEEE staff if he knew, and the answer was 'I suppose, somewhere in Africa?' Of course I had deliberately chosen to use the name Crna Gora (rather than the "English" translation Montenegro).

VI. PROGRESS AND SUCCESSES

A. Region 8 Committee meetings in the new Sections

After the changes, there was a rapid development of IEEE activity and formation of new Sections. An R8 Committee meeting was held in Warsaw in Spring 1991 during what were still difficult economic times for Poland.

However, growth in membership numbers was (and still is) slow. The economic changes meant that IEEE membership was unaffordable for many professional engineers and academics. Senior members of national research institutes were often able to join using other than personal funds, but in a few cases, they regarded IEEE membership as something of a privilege which they were reluctant to share with junior colleagues, feeling that would be diminish their personal status and importance.

In support of the newly formed Sections, the R8 Committee held many of its meetings in the Central and Eastern European

areas. My election as R8 Director during this time enabled me to encourage the choice of some of these locations.

A meeting was in Prague, Czech Republic, in 1994 then in Berlin, Germany in 1999 in what had been East Berlin (part of the former GDR). Following this came Budapest, Hungary in 2002, Zagreb, Croatia in 2003, Kraków, Poland in 2004, Vilnius, Lithuania and Belgrade, Serbia in 2006, Sofia, Bulgaria and Bucharest, Romania, in 2007, then Riga, Latvia in 2010. At present, plans are being made to hold an R8 Committee meeting in Talinn, Estonia.

Figure 3.   View from R8 Committee meeting hotel in Vilnius

Because of my prior familiarity with several of these locations, it became customary for me to provide a 'Travel Guide' for the R8 Committee meeting participants, and after a while some people even expected me to do that for places that I had never visited!

The Czechoslovakia Section was formed in 1992 and despite the split of Czechoslovakia into the Czech and Slovak Republics, a single Section for both has been retained, although that may not be sustainable in the long term.

Figure 4.   R8 Directors (past, present and elect) in Novosibirsk

VII.   THE SPECIAL CASE OF THE RUSSIA SECTION

Russia was something of a special case – a huge country with many locations which have extensive scientific and engineering activity at a high level – where one might expect, in the long term, to see many IEEE activities develop. However after the IEEE Russia Section was formed in 1990, membership growth was very slow, mainly for economic reasons, although many Chapters were formed, most with the aid of the financial support initiative from IEEE Societies, especially Electron Devices, who, as explained above, paid for initial memberships so that Chapter formation petitions could be created, and there were many IEEE conferences held. However, Chapters in parts of Russia remote from Moscow sometimes complained of lack of support from their Section, and after a while moves to provide some independence for activities in St. Petersburg (former Leningrad) and Siberia arose. After some suggestions to form a Russia Council were abandoned, there was finally agreement to form three Russia Sections, one to be called 'North West' and one 'Siberia' – while the original Russia Section retained responsibility for all other parts of the country. Existing Chapters were transferred to the newly formed Sections where the location of their principal activities justified it.

VIII.   DIFFICULTIES AND UNDERCURRENTS

A "problem" with some of the new Chapters was an unwillingness of the initial Chapter Chairs to hold elections and be replaced by other volunteers, resulting in some very long-serving Chairs. This also happened with a few of the new Sections.   In the Ukraine Section, there were strong 'differences of opinion' between a Chapter in the East part and another in the West part!

Sometimes, the position of Section Chair or even Chapter Chair was taken by a very senior person, who was unwilling to do very much for IEEE but also unwilling to stand down and be replaced (since there was no tradition of giving up a position voluntarily).   This could also be connected with an unwillingness to actively recruit new IEEE members, because the fewer their number, the more 'important' the Chair would feel – e.g. his "exalted" position as an IEEE member was felt to be a "privilege" which would be decreased by having other members around.

IX.   THE BALTIC REPUBLICS

When the three Baltic Republics (Estonia, Lithuania and Latvia) gained their independence from Russia, there was a suggestion from the R8 Committee management to try to form a single 'Baltic' IEEE Section, combining the three countries. There was a mistaken belief that they were all rather similar, with languages incorrectly assumed to be Slavic! It took some persuasion to convince some senior IEEE R8 volunteers that this was not the case, and that each of the three had a very different language and culture.

An early step was the formation of a Chapter in Estonia, which was affiliated with Finland since there was no Estonia Section. I had the pleasure of announcing the formation of this Chapter to a meeting of the R8 Committee in New Brunswick, USA in Spring 1998. To the puzzlement of all except the IEEE Finland Chair, I preceded my announcement by asking the Committee to listen to some music played over the audio system – this was a recording of the Estonian National Anthem, to celebrate the formation of the first IEEE

unit in Estonia. It was immediately recognised by the Finland Section Chair because both countries share the same tune for their National Anthems, even though the words are quite different. During the time of the Soviet Union, playing the Estonian National Anthem or showing the Estonian flag were serious offences. Some time passed before the three Baltic countries had their own Sections, with the Latvia Section having only recently been established (in 2008).

Figure 5.   Award for Estonia Section given in Belgrade

As mentioned in a September 1995 interview by Bob Winton (archived at the IEEE History Center and with a link from the R8 website), initial attempts to form a Lithuanian Section involved Prof. Raimundas Jasinevicius, from Kaunas University of Technology, who had established links with universities in London, England many years before, for the frequent exchange of junior academics, etc. Progress with Section formation was very slow and made slower by his absence in Denmark for six years as Lithuanian Ambassador. The Section was finally established in 2005, based mainly in Vilnius and followed by Estonia Section formation in 2006.

X.   THE SPECIAL CASE OF YUGOSLAVIA

IEEE activities in the former Yugoslavia were another special case. The Yugoslav Section was formed in 1971 and became moderately active in holding conferences and in providing IEEE volunteers.

Following the wars in Yugoslavia, the existing Yugoslav Section was split into three with Slovenia and Croatia Sections formed, and the residue called the Yugoslavia Section. These three Sections were established in 1992. The newly formed countries had established their own currencies, so that the old Yugoslavia currency in effect lost all of its value. Consequently the funds in the 'blocked currency account' (described in Section IV) were never fully used and most were effectively lost by IEEE.

In 1997 a Macedonia Section was formed. Calling the residue of the original Section by the name Yugoslavia became an increasing anomaly, and in 2005, it was renamed the Serbia and Montenegro Section. Later Bosnia and Herzegovina formed a separate Section.

XI.   LOCATION OF COMMITTEE AND SUBCOMMITTEE MEETINGS

Because of a number of rather new Sections wanting to host the R8 Committee, the R8 Committee management was glad of opportunities to welcome these new Sections by meeting on their territory as described in Section VI above.

The R8 Opcom meets twice per year, and comprises eight people (Director, Director Elect, Past Director, Secretary, Treasurer and the three Vice-Chairs), and meetings of such smaller subcommittees were from time to time arranged in places where a meeting of the whole R8 Committee would have been impracticable for reasons of travel cost or visa problems for some Section Chairs. For example, meetings of the R8 OpCom were held in Bucharest, Dubai and Tangier.

This applies to the even smaller R8 Nominations and Appointments (N&A) Committee, which met in Novosibirsk, Siberia in 2006, and included visits to universities, to research institutes in Akademgorodok and to an IEEE student branch at Tomsk. The R8 N&A Committee also met in Sofia and Ljubljana.

XII.   STUDENT ACTIVITIES

R8 has a long and successful tradition of strongly supporting Student Activities, maintained for the new Eastern European locations. Of particular note is the Student (and GOLD) activity in Siberia, the Technical English programme initiated in St. Petersburg (former Leningrad), and the 24 hour extreme programming contests, initially in Budapest. Student branches have been very active in some countries of the former Yugoslavia.

XIII.   CONCLUSIONS

The expansion of IEEE R8 activities into the countries east of the former 'Iron Curtain' can certainly be regarded as a welcome success. It has brought personal contacts, new opportunities and an awareness in that area of what may be called the 'IEEE way of doing things'. However, it may also be regarded as disappointing in that the growth in Sections, Chapters, Conferences, etc. has not been matched by a corresponding growth in participating engineers as a proportion of those present, nor in a corresponding growth in membership numbers, and it is possible to observe some continuation of the 'old way of doing things' – notable particularly in doubtful election processes in the replacement of IEEE office-holders (e.g. Section or Chapter Chairs serving in the same position for very long times) – this is, however, by no means a situation found only in the former Communist countries of Europe.

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