

Final Report on ICSE2000

Submitted to

ICSE Steering Committee – 14 May 2001 – Toronto

by

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Report history

Author Kevin Ryan – 8 May 2001 (not cleared with General or PC Chairs)

16 May 2001 (distributed to Steering Committee)

21 May 2001 (amended/corrected version emailed to ICSE SC.Chair)

1. History

About 10 years ago I thought of having ICSE, the premier software engineering conference, held in Ireland both because of Ireland's popularity as a conference location and in order to publicise the growing Irish software sector. With advice from some seasoned ICSE people, notably Barry Boehm and Peter Freeman, and with strong encouragement from Anthony Finkelstein, I drafted a short letter, setting out the case for an 'Irish ICSE' and, not knowing any better about ICSE protocol, distributed it at 18th Annual ICSE in Berlin. For the next ICSE, in 1997 in Boston, I had a presentation ready for the Steering Committee but was not called upon to give it. Instead, the committee persuaded Carlo Ghezzi to be General Chair and to work out, with me, a mutually satisfactory division of duties for an Irish-based ICSE. This was readily done. Carlo had no wish to be involved with either organisational or financial matters – the areas I had most concerned myself with so far – but was willing to apply his considerable experience to designing and delivering a high-quality technical programme. Thus, although I would not be in charge, I knew that, with the addition of Alex Wolf and Mehdi Jazayeri, we had an excellent team in place. It would be fair to say that I found the bidding process obscure and unhelpful.

During the prolonged discussions over ICSE2000, I agreed to organise the IEEE Requirements Engineering Symposium – RE99. This might have been unwise but allowed for a 'dry run' on a smaller conference, at the same venue, with the conference management company and project manager that were to run ICSE2000. We did learn a number of useful lessons. In my opinion, neither the company nor the manager did a good job and that, combined with very poor attendance, resulted in a substantial loss and generally mixed reviews. On the other hand the venue and accommodation were both well received.

2. Local Organisation

Some ICSE Steering Committee members and the other ICSE chairs identified two major risks

- running the conference in Limerick rather than Dublin
- selling on-campus accommodation to ICSE delegates

Assessment of both depended on assumptions about likely attendance levels which were particularly difficult to make in this instance with no history of large software conferences in Limerick and great variability in recent ICSE numbers. Addressing both issues, to the satisfaction of those who were concerned, was time consuming for me and my colleagues. In the event, neither issue materialised as a significant problem. With regard to anticipated numbers, the TMRF was budgeted on (an optimistic) 650 attendees with a 'survival' figure of 450 and the highest imaginable being 750+.

It did not help that RE99 had had poor attendance and registered a substantial loss. The RE99 difficulties gave cause for worry especially as the same conference management company and project manager were to run ICSE. Frank and full negotiations took place with the conference company and concessions and commitments secured. At the same time the project manager was absent for 3 months and subsequently resigned. While this caused some disruption it galvanised the local organising committee into action and, from Dec '99 onwards, there was a united and effective group working on ICSE at Limerick.

3. Finance

Major uncertainties surrounded the financial planning, relating both to projected attendees and to the level of sponsorship attainable. The TMRF was devised with a 'minimum' attendance, to break even – paying no administrative fees - of 450, but this assumed substantial sponsorship and tight financial control. Before the location had been decided two major sponsors, Iona Technologies and the Irish Government Software Directorate had committed approx. \$60k and their support was a major factor in getting additional sponsorship, eventually totaling over \$120k. This provided a 'cushion' against low attendance or unexpected expenses.

The full TMRF and the actual outcomes are given in Appendix 4. The notes explain most of the main variances. In setting the budget a number of key decisions were made

- Workshop charges were set close to those for Tutorials
- The "State of the Art" (later FoSE) volume was budgeted separately
- Lunches and evening meals were included on all three days
- Free registrations were kept to a minimum
- No printed advanced program was to be produced
- A postcard was to be sent instead

The ACM were very active in advising on the budget – since their TMRF was being used. The IEEE were less involved – especially when, for cost reasons – it was decided to use the ACM Press for both the Proceedings and FoSE. The budget included a 2.25% administrative fee for each organisation. The Irish Computer Society (ICS) was the local (50%) sponsor but, as a very small body, its support was mainly in publicising the conference locally and identifying potential sponsors. It did not charge a fee.

The overall outcome was a surplus of approximately \$94k which was split 25%, 25% and 50% between ACM, IEEE and ICS. With the inclusion of administrative fees the amount paid to ACM and IEEE was \$36,794 each. The final accounts, as accepted by ACM, together with explanatory notes are given in Appendix 4.

4. Programme

The programme was designed to have a strong technical core but also to include a number of innovative features. Extensive publicity and promotion attracted over 350 papers of which only 49 were accepted. Large numbers of tutorials were also submitted and there were 3 substantial collocated events, each of which dealt separately with the conference management company. Notable among the special tracks were those devoted to Industrial Practice, Education and Training and to Research Demo.s. These were reasonably successful. However the major success was the Future of Software Engineering (FoSE) track which had an attendance of over 200 at almost every session. Attendances for most sessions are given in Appendix 1. We had to correct them as, with such high numbers, we were running very near to capacity.

5. Project Management

Two years before the conference date we had a lengthy site visit and project planning meeting in Limerick. By the end of this we had identified key themes, special features, candidate keynote speakers (most of whom we got) and an outline project plan for ICSE2000.

The separation of roles generally worked quite well. Difficulties arose around publicity, document publication, the conference website and the performance of the conference management company. These were all resolved amicably – eventually – and never impacted significantly on either the overall programme or the conference budget. They took some toll on our nerves but we recovered.

A key success factor was Carlo's decision to have a one-week meeting in Vienna in February 2000. This week included

- the full PC meeting
- an Organisation Committee meeting
- finalising the registration forms (web and print)
- preliminary room allocations
- drafting of the final programme

Many major issues were resolved during this week, including some that could have had major repercussions e.g. unbundling the banquet, defining the accommodation options.

6. Lessons Learned

It is appealing to seek an 'ICSE model' that would ease the burden of future organisers. Perhaps even an ICSE knowledge base that would answer (most if not) all the questions that come up. However I believe this is a chimera since each ICSE is, by definition, different. Other conference series are run by more or less the same people in more or less the same place every year. Consequently they are predictable, easily planned and generally smoothly delivered. But they are also predictable, unexciting and often incestuous. The itinerant nature of ICSE is one of its key attractions. In Japan it was Japanese, in Berlin very German, in LA Californian and in Limerick it was Irish. In North America ICSE is usually in a hotel; in Europe at a University. Some are in large cities, some in quite small but each was organised by a different team which delivered a variation on the running theme of ICSE. While reports such as this – and the advice of previous organisers – are to be welcomed and valued, it is the constant innovation that makes ICSE the best event on the Software Engineering calendar.

ICSE 2000 was an example of a small city, university-based ICSE. It had much in its favour – facilities, scenery, good tourism, and excellent programme – it also had challenges, such as – a small city with limited local software industry, poor public transport, capacity limitations and few nearby hotels. The local team managed to minimise the impact of most of these but they also had good luck. If they were running it this year – (2001) they would have faced foot and mouth disease, a shaken IT sector, gridlocked traffic and who knows what kind of weather.

The 'Lessons Learned', which were passed on to the organisers of the next ICSEs are given in Appendix 3.

7. Overall Assessment

ICSE2000 was a definite success. Over 990 people attended some or all of the ICSE week; the survey and anecdotal evidence indicated a high level of satisfaction and the financial outcome exceeded the most optimistic expectation. Equally important was the delivery by a distributed, disparate and occasionally desperate team of a successful project with good humour, efficiency and no small measure of enjoyment. I am grateful to the ICSE Steering Committee that we got the chance to do so.

A summary of the 137 responses to the attendee questionnaire is given in Appendix 2.

8. Thanks to:

I would like to record my personal gratitude to

Barry Boehm, Wilhelm Schaefer and Peter Freeman for encouraging me to 'bid' for ICSE in Ireland,
Jeff Kramer for his wise reflections,
Anthony Finkelstein for his support and especially for devising and delivering FoSE,
Hal Hart and Julie Goetz for assisting me, each in their own way, with financial planning.
Alex Wolf and Mehdi Jazayeri for their energy and vigilance in keeping ICSE up to standard,
Carlo Ghezzi for his tolerance, integrity and strategic thinking,
The Steering Committee, the Organisation Committee and the Program Committee,
The ACM, IEEE and ICS staff for their advice and support,
The President and all the staff of University of Limerick and of Plassey Campus Center

and above all to

The Local Organising Committee and Student Volunteers who did more than anyone else to make ICSE at Limerick a success.

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Appendix 1

Summary of Session attendances at ICSE 2000 Nov 2000 – KR

{Due to near capacity attendance we had to count the numbers in each lecture theatre so as to ensure catering facilities met delegate needs. This was not done for some sessions – notably plenaries and the last sessions of some daily tracks.}

<i>Day/Session</i>	TProg1	TProg2	FoSE	PETT	SEAT
Wed S2	120	110	160	64	84 (TP)
Wed S4	N/A	12	200	70	18
Wed S5	N/A	N/S	210	68	N/A
Thurs S7	124	67 (SEAT)	220	56	44 (RD)
Thurs S8	85	85	200	56	11
Thurs S10	134	35	160	49	21 (RD)
Thurs S11	N/A	N/A	225	N/A	20
Fri S13	140	35	100	50	20 (RD)
Fri S14	132	44	110	35	20
Fri S15	70	40	79	35	23 (RD)
Fri S16	24	65	60	No session	45 (RD)

TP – Technical Programme

RD – Research Demo.

FoSE – Future of Software Engineering

PETT – Practical Experience and Technology Transfer

SEAT – Software Engineering Education and Training

Appendix 2

ICSE 2000 Evaluation Forms

Part 1 - Industry

57 Forms Returned

39 had not attended ICSE before

4 had attended 1 ICSE

4 had attended 2 ICSEs

3 had attended 3 ICSEs

3 had attended 4 ICSEs

4 had attended 5+ ICSEs

5->best 1-> worst

Invited Speakers

	5	4	3	2	1
M Castelles	15	21	9	2	0
G Booch	28	19	8	0	0
C Horn	5	4	3	2	1
	8	12	17	4	0
A v Lamsweerde	5	4	3	2	1
	9	18	16	2	0

ICSE

Quality of Advance Material/www

5	4	3	2	1
11	28	16	1	0

Sessions Met your objectives

5	4	3	2	1
5	23	19	8	0

Quality of Content

5	4	3	2	1
3	25	21	4	1

Conference Facilities

5	4	3	2	1
17	20	18	1	1

Accommodation

5	4	3	2	1
28	11	4	0	0

Food & Beverage

5	4	3	2	1
10	14	22	7	4

Receptions/Social Events

5	4	3	2	1
5	4	3	2	1

	8	25	15	4	0					
<u>Sessions</u>										
Tutorials	5	4	3			Workshops	5	4	3	2
	8	18	6				3	5	6	1
Technical Papers	5	4	3	2	1	PETT	5	4	3	2
	3	15	17	7	1		5	13	9	0
SEAT	5	4	3	2	1	Future of S/w	5	4	3	2
	1	5	4	1	1		8	20	15	4
Res/Demos	5	4	3	2		Invit Pres.	5	4	3	2
	4	5	1	1			13	21	6	0
Panels	5	4	3	2		Posters 5	4	3	2	
	2	2	5	2			1	4	10	2
Tech Fac.	5	4	3	2	1					
	5	11	3	1	1					

Individual Comments

- The organization is great
- Well organized and staffed but inconvenient facilities
- Very good organization
- Limerick not suitable for a conference of 1000 – hotels too spread out – bus transport useless
- Conf facilities too spread out
- Well organized though spread out
- Organising company very limited help and seemed to be very unorganized
- Hotels too far away – bus transfer more than once a day
- No shuttle from Kilmurray Village for baggage on Friday
- Thursday evening was too expensive
- Shuttles were good
- Needed better sound amplification
- Needed Bigger Signs
- Needed better time management
- Cost should be lower
- Students very helpful and friendly and efficient
- Student helpers were excellent, competent and very pleasant
- Good use of student guides
- Need better maps on Web
- Great web access
- Internet access lab was a disgrace no access to hotmail via netscape/IE despite repeated requests
- Package proceedings on compact disc
- Papers/presentation said very little – should be more relevant technical papers
- Presentation should be 45 min
- Should be subjects concerning real business company's interests and competitive environment solutions for business
- Have half academic & half industry to referee papers

- Content is getting too academic
 - More contribution from industry – more real life case studies
 - Needed fewer, more content laden papers or extra day
 - Speakers should not just read visuals but comment on their content
 - Should be able to attend more than 1 tutorial
 - Technical papers are loosely correlated.
 - Session chair acts only as an announcer.
 - Think about better relation of the contributions to each other
 - Session chair should give a short problem picture e.g. identifying current research areas, issues, existing work. – this would contribute significantly to the goal of bringing our discipline ahead
 - Quality of some papers not good
 - Presenters and Chairs are not using time well
 - Much better lecturers/subjects than previous ones
 - Give less lectures but more time for each
 - Give the book of lectures in advance to have time to learn the material and discuss the subjects
 - Need More involvement from the big/main manufacturers – IBM, Sun, Microsoft
 - All panel discussions should have at least half their time devoted to discussion
 - Better vetting of papers – standard varied too much from excellent to very poor
 - Provide templates for slides – avoids disastrous choice of fonts/colours
 - 30 mins too short for some topics
- Castells should have used visual aides
 - Chris & Axel too inward focused
 - Chris could have gone more technical with this community.
 - Axel – not enough about the future.
 - Castells should have provided view graphs

ICSE 2000 Evaluation Forms

Part2 - Academic/Research

80 Forms Returned

43 had not attended ICSE before
 13 had attended 1 ICSE
 8 had attended 2 ICSEs
 6 had attended 3 ICSEs
 3 had attended 4 ICSEs
 1 had attended 5 ICSEs
 6 had attended 5+ ICSEs

Invited Speakers

M Castells	5	4	3	2	1
	31	22	9	6	1
G Booch	5	4	3	2	1
	33	24	10	1	2
C Horn 5	4	3	2	1	
	7	19	20	9	2

A Lamsweerde	5	4	3	2	1
	14	17	16	2	1

ICSE

Quality of Advance Material/www

5	4	3	2	1
16	41	16	2	2

Sessions Met your objectives

5	4	3	2	1
8	38	26	7	0

Quality of Content

5	4	3	2	1
10	37	22	9	0

Conference Facilities

5	4	3	2	1
31	35	6	4	2

Accommodation

5	4	3	2	1
15	24	28	6	2

Food & Beverage

5	4	3	2	1
14	34	16	8	6

Receptions/Social Events

5	4	3	2	1
10	28	19	11	3

Sessions

Tutorials	5	4	3	2		Workshops	5	4	3	2	
	3	4	2	1			11	16	7	0	
Tech. Papers	5	4	3	2	1	PETT	5	4	3	2	1
	3	29	22	5	1		5	14	7	0	1
SEAT	5	4	3	2	1	Future of S/w	5	4	3	2	1
	3	10	8	0	0		17	28	14	5	0
Res/Demos	5	4	3	2		Invit Pres.	5	4	3	2	
	2	11	7	2			16	28	13	0	
Panels	5	4	3	2		Posters	5	4	3	2	
	2	11	9	6			0	8	8	4	

Tech Fac.	5	4	3	2	1
	11	16	2	1	0

Comments

- Much of the accommodation was too far from the conference location
- The physical distribution in various locations did not help - networking was harder than usual
- Consider putting on a programme for non-delegates (spouses)
- Conference worse than other ones I attended
- More bus service to outlying hotels
- No BOFs, no SIGSOFT general meeting
- Little ability to meet during lunchtime
- Less spread-out facilities
- Unity of conferences coordination
- FOSES room too small
- Accommodation and conf site should be nearby
- Maps with more detail would have helped
- No micros e.g. CSG01, cold
- The long day was fine
- Environment is nice
- Bus shuttle is very time consuming
- Conference bureau could have done much better
- All accommodation should be close to conference
- Accommodation was too far away from venue and without public transportation
- Limerick Inn too far away

- Very well organised - congratulations to all organisers
- Tech and admin support better than previous conferences
- Best organised conference I have ever been
- Excellent - the best ICSE I ever attended - chair and PC chairs to be commended - FOSE was a brilliant idea
- Better than ICSE98 in Kyoto and ICSE96 in Berlin
- Venue better than LA airport but still inconvenient - should be downtown, in a single place (no campus)
- Don't bother with banquets especially with poor food and low-key entertainment
- The banquet should have been somewhere more Irish.
- Bad service at banquet
- Timing of socials poor
- Food too fat, too little
- Breakfast far below promised - make sure advertised services are fulfilled.
- No coffee at morning sessions
- Local arrangements were poor - no breakfast at conference even though the bus from the hotel arrived at 8am - also would be better to run more frequent buses in the evening
- No breakfast on Saturday and Sunday - lack of food for vegetarians
- Receptions/food at social events was poor - many people were still hungry/thirsty at BBQ and had to pay their own drinks, similar problems at banquet

- Put mag ads in before August as they take 6 weeks to reach us
- www needs contact phone numbers so our spouses can contact us while we are here
- Internet access was wonderful
- Web page was too little too late always
- Online registration and website had low usability - some info (like conf. fees) not available until after one registered
- Invited speakers - excellent choices
- Invited speakers - technical content is better than entertainment

- Invited speakers - there should have been a woman
- C Horn did too much selling
- C Horn presentation too commercial
- More invited speakers
- Too little time for questions - too many points in talks of invited speakers

- Volunteers are very friendly and helpful
- Students were splendid
- Volunteers were extraordinarily helpful and signage and coordination were excellent
- Student workers were excellent

- SE and middleware was a marketing talk
- Focus on a theme
- Less variety in overall programs - too many parallel sessions
- SDDL coverage of Req eng and its relationship to Sw arch. development needed
- Too many parallel sessions
- Split proceedings into two volumes (a) Technical papers (b) the rest
- Too much content - need to be more selective
- Fewer Tracks and more posters and birds-of-a-feather sessions needed
- Why not get someone in SWEEP or someone doing SE education research to do the FOSE talk on education
- More on professional issues (body of knowledge, licensing/certification)
- Addition of SEAT track was good
- Technical papers were weaker than in previous years
- Stress the fact that attendees should stop talking during presentations
- Fair, transparent reviewing + focus on quality + focus on attendee interest
- Software exhibits should have been better promoted/scheduled/organised
- Good venue a somewhat weaker technical program
- The auditorium setting works much better than hotel conference rooms
- I thought the quality of the technical program was clearly lower than last year - also there were several cases of closely related sessions being scheduled at the same time
- Program better - Accommodation/transport worse
- Announce cancellation of talks/panels in advance rather than rely on attendees hearing announcement at start of session
- Print quality of proceedings is poor
- Have fewer parallel sessions - some sessions had extraordinarily few people attending
- Chance of sessions getting sidelined due to placement in program/session title is greater
- Have reserved time for poster presenters
- Make sure the space is big enough to accommodate all attendants - I was very unhappy they didn't let me in for a session repeatedly (room CSG01)

Appendix 3

What we Learned from ICSE2000 – Report from Local Org. Comm.

Oganisational

- Agree and circulate Protocol for Collocated Events as early as possible
- Consider the pluses and minuses of Hotel v University location e.g. Univ. rooms are cheap and technical support better; Hotels are more convenient and remove accommodation booking and transfer problems.
- Get your local team together at least 9 months before
- Look for enthusiastic, 'can do' people
- Assign duties clearly and notify Org Comm and Prog Comm + authors
- 'Project manage' from at least 12 months before
- Define and publicise the constraints for AV, Tut payments, room types, keynote content/objectives, presentation formats... etc
- **Consider a design studio to give you a conference motif/style**
- Have one central admin person (full time if you can) with the icsexxxx email address
- Consider special tracks PETT, SEAT, FoSE – but each needs a champion
- Agree a division of duties General v Financial v Logistics – most ICSEs group Gen+Finance, this one had Finance+Logistics
- Get ALL presentations one week beforehand – amend later if needs be
- Set limits for the size of Workshop and Tutorial Notes
- Conference Management companies are helpful but ICSE is among the most complicated conferences- do NOT assume they know anything about it
- Get REALLY good people to do your on-line registration – may mean doing it yourself
- Use walkie-talkie as well as mobiles (cellphones) (broadcast v private)
- Book publishers add a lot to the 'buzz'
- Arrange and publicise childcare
- Do a "Hotel Welcome Pack" – but don't assume they've read it!
- Allow for a lot of Internet machines open a lot of the time. IP addresses for laptops should be arranged in advance
- Have a mix of formal and informal social events
- Unless everyone can stay in the conference location good public transport is very important (**not available in Limerick**)
- Cities below a certain size may not be able to host ICSE. Limerick may be about the smallest possible host city (80,000 people)
- Above all have your own 'style' for ICSE – **make it distinctive**
- If you have a printed WOW – **keep it in proportion** – the www version is more important

Financial

- Plan for the worst – to counter your optimism
- Allow for unexpected expenses – but ACM/IEEE allow for some
- Include some luxuries and drop them if you have to
- Seek plenty of sponsorship well in advance. **Define your sponsorship ‘deal’ very carefully to ensure a ‘win-win’**
- **Charge a substantial workshop rate even tho’ they cost little**
- Control tutorials and market them early (cancel or renegotiate terms if you need to)
- Consider using a PR company (for sponsors sake)
- Get an ICSE bank account and cheque book
- Have ONE person who authorises all payments

Appendix 4

ICSE2000 Financial Outturn

Notes on ICSE2000 outturn

1. Exchange Rates

The budget was framed when the Euro was at \$1.07; registration fees were set when the Euro and \$ were near parity. Subsequently the Euro sank to 83cents before returning to approx 92cents at present. We have converted actual costs to the dollar equivalent when they were incurred. Most of the outstanding payments (to ACM and IEEE-CS) are in dollars. We will pay the Irish CS at the rate applicable when we close.

2. Workshops

We greatly exceeded our target especially for 2 day events.

3. Banquet

We had to unbundle the banquet due to capacity constraints so it appears as a separate cost and revenue item.

4. Tutorials

We got much fewer member tutorial attendees than expected.

5. Sponsorship

This greatly exceeded budget but it did impose extra costs – for lunches, coffee/tea, publicity, extra proceedings, PR, photography.

6. Shipping CFP

Postage costs from Ireland could not get bulk rates so we shipped the N American ones to LA and had them mailed there.

7. Final Programme

Due to sponsorship and indications of good numbers we opted for a very high quality, colour Final Programme.

8. National Press

This includes a professional PR company, extra photos and accommodation for journalists.

9. Signs

These had been omitted from the budget. We had high quality ones designed and erected.

10. Conf Newsletter

No budget had been allowed for WOW (conf newsletter). It proved quite expensive but was agreed to because of good finances.

11. Miscellaneous Expenses

This includes a wide range of unanticipated expenses including: cost of merchandise; accommodation and food for volunteers; conference umbrellas - one for each delegate. These expenses were not allowed until the financial position was clear.

12. Cont. Breakfast

We provided these to allow each day's speakers to meet beforehand.

13. Tutorial Honoraria

These are over budget as the dollar rates agreed were more expensive due to drop in value of the Euro. They were paid on site.

14. Bank Charges

Now included in the Conference Management Co. fee.

15. Conference Management

We hired Incentive Conference Ireland and our budget was based on their contract price. However 3 factors increased their charges

- we had not allowed for Bank Charges (approx 3% of registration fees)
- we had not included VAT (sales tax) which is 21% of their fee
- our budget was based on approx 400 delegates. Their fee was charged per delegate, so went up with the greater numbers.

16. Coaching

We anticipated having most people on or near campus. The greater numbers forced us to use more remote hotels, leading to greater transport costs.

17. Admin. Fee

The Irish Computer Society (50% sponsor) did not require a fee but will get their share of the surplus.

18. Advances and Accounts

No advance payments were made by ACM. Initial working funds were provided by University of Limerick who also provided the (non-registration) financial services for the conference project.

Note: the TMRF is shown in the accompanying spreadsheet.