

A Guide to the FM Symposium

Version 3.5 - December 2015

The FM Symposia (“FM 20XX”) are organised by Formal Methods Europe (FME), a small association of members active in the field of formal methods¹. This guide is intended for those considering making a proposal to host an FM symposium. Based on experience gathered from past organisers, it covers the bidding process (Section 1), the symposium’s organisation (Section 2) and financial matters (Section 3). Section 4 contains advice from organisers of recent events. Appendix A lists leading participants in the symposia to date. Appendix B and C provide additional information with respect to setting up a symposium budget. Constructive suggestions to this document are welcome and should be sent to info@fmeurope.org.

1. Proposing to Host FM 20XX

The symposia are held at intervals of (very roughly) 18 months. A call for proposals to organise the symposium is issued to the FME membership mailing lists and announced on <http://www.fmeurope.org> about two years in advance of the conference due date. If you are considering making a proposal, we recommend getting in touch with info@fmeurope.org. We are happy to offer information and advice. Note that the location for the symposium is not bound to Europe and we positively welcome proposals from all parts of the world.

The call contains details of the contents required in the proposal but, as a minimum, you will need to identify a host institution and describe the facilities, local support from academia and industry, and forms of available sponsorship. Initial proposals are short documents, but the authors of the most viable proposals will be contacted by FME with further specific questions during the review period. Proposals are assessed by the FME board with the support of advisors who have no connection with any of the proposals.

After the winning proposal is selected, a formal contract is negotiated with the prospective organiser. The contract must contain (a) the normal commercial clauses (b) a provisional call for papers, (c) a financial budget and (d) a symposium management plan.

2. Symposium Organisation

The key people in the organisation are the **General Chair** (usually one person) and **Programme Committee Chairs** (usually two). Below that management level, FME places no formal requirements on the organising structure, which is defined by the Chairs.

Selection of the General Chair: The General Chair is invited by the Chair of FME and is usually the same person as the proposer. The General Chair is normally expected to represent the host institution and must have the authority to mobilise its resources. The General Chair has full freedom and responsibility for the organisation of the event within the terms of the contract between the host institution and FME.

¹ www.fmeurope.org

Selection of Organising Committee(s): The General Chair will normally select members of a team needed to organise all aspects of the event and to handle specific aspects, such as publicity, sponsorship and so on. The structure and composition of this group is entirely up to the General Chair and not FME. Organising Committees typically include the following portfolios:

- Local organisation and accommodation
- Publicity
- Tutorials
- Workshops
- Industry Day
- Doctoral Symposium
- Exhibition & Tools Demonstrations

Selection of the Programme Committee Chair(s): The Programme Committee (PC) Chairs are selected and invited *by the Chair of FME* in consultation with the General Chair, the FME Board, selected colleagues, former PC chairs and FME members. In recent years, we have preferred to have two PC Chairs with some diversity in background and geographical location. *Proposers are welcome to suggest potential PC Chairs but, to avoid embarrassment, proposers must not contact potential PC chairs directly as selection and invitation is made by the board of FME.* The PC Chairs have freedom and responsibility for the provision of a successful scientific programme for the main symposium.

PC Composition: The PC Chairs choose the PC members in consultation with FME (to help ensure consistency from conference to conference). Previous PC members do not have an automatic right to serve: chairs are free and encouraged to mix new and experienced members. Geographical coverage and industry/academic balance are important for FM Symposia, which are worldwide, not European, events.

The **PC size** has been increasing of late in order to reduce the burden of reviewing on members without compromising the number and quality of reviews. For a regular symposium, the PC size has been around 40, but for larger events such as FM'99 and FM'09, the PC has been much larger (83 in FM'09). An average review load is now under 10 reviews per PC member. PC chairs usually seek 3 or 4 reviews per paper.

Tentative Scheduling:

A rough schedule for preparing papers, tutorials and workshops:

T - 15 months:	Advertising: CFP (latest)
T - 6 months:	Papers: submission
T - 6 months:	Workshops & Tutorials: submission
T - 5.75 months:	Papers: Distribution to PC
T - 4.75 months:	Papers: Reviews completed, start of (virtual) PC meeting
T - 4 months:	Workshops & Tutorials: Notification
T - 4 months:	Papers: Notification
T - 3 months:	Tool Exhibition: submission
T - 3 months:	Papers: Final Versions to PC Chairs
T - 3 months:	Final Version of Proceedings to Springer Verlag
T - 3 months:	Notification: Tool Exhibition Proposals
T - 0 months:	Enjoy Symposium

Note that FM symposia almost always have had a strict submission deadline policy. Deadlines are not extended and we hope to keep it that way.

Symposium format: The format is up to the General and PC Chairs. In recent years, the event has lasted five days (Monday to Friday) with two days of workshops and tutorials followed by three of technical symposium. The Industry Day (see below) can run as a parallel track. The three days of the main technical symposium have usually begun with a plenary session featuring a well-known invited speaker. Where the volume of papers requires it, parallel sessions are sometimes used to give each author sufficient time to present his or her work (typically around 30 minutes per regular paper), with aligned morning and afternoon tea breaks to switch tracks and visit the tools exhibition. *This symposium format is by no means mandatory and innovations are welcome.*

Industry Day: FME has a Memorandum of Understanding with the ERCIM Working Group on Formal Methods for Industrial Critical Systems (FMICS) on jointly organising an industry-focused event annually. The Symposium may be requested to host this event under the name of the “Industry Day” (I-Day).

The programme consists largely but not exclusively of invited talks given by practitioners rather than researchers. The plenary invited speaker on I-Day can be shared with the regular programme. In recent years, abstracts (about 4 pages each) of the I-Day presentations have been included in the LNCS proceedings and the I-Day presentations have been provided electronically after the event. I-Day has been notably successful in bringing industry and academia together, always with high attendance numbers and inspiring discussions. It is organised by two co-chairs, one from academia and one from industry, working in close collaboration with the PC and General chairs. The I-Day can be instrumental in bringing industry to the symposium, especially if it is offered and published as a one-day networking event, backed by some local special interest group or institute. *Again this format is certainly not mandatory and innovations are welcome.*

FME Business Meeting: FME holds an open business meeting on one of the technical symposia days at lunch time – usually coinciding with the I-Day, when there is one. A suitable room with presentation facilities should be made available for this meeting. About 30 participants can be expected.

Awards: A "Best Paper Award" should be given for the best technical paper presented at the symposium. The Programme Chairs are responsible for organising the selection of this paper. Any costs associated with this award should be on the Symposium budget, but the FME board does not expect that any more than a certificate is presented. FME may also present its own awards at the Symposium. In that case, FME will cover the cost of the awards themselves, while the Symposium should budget for travel and free attendance for awardees. The General Chair should make sure that the Symposium schedule accommodates both "Best paper" and FME awards.

Advertising: We stress the importance of advertising all the parts of the symposium, especially workshops and tutorials, as well as the “traditional” conference. Flyers, an appealing web site, use of mailing lists and social networking sites are means to organise publicity and advertise the symposium. This may also be important to prospective sponsors of the event. Special care has to be taken to attract local industrial practitioners.

Proceedings: All previous symposium proceedings have been published in Springer Verlag’s Lecture Notes in Computer Science (LNCS) series. The Programme and General

Chairs should approach our contact person² at Springer for initial approval *as soon as possible*. Springer will advise on the schedule for getting copy to them for printing. You need to work back from this to get submission dates, using the rough schedule above. General chairs should contact their immediate predecessor, before contacting Springer, in order check the ins and outs of the publishing contract. In the recent past, Springer has also sponsored a best paper award.

3. Symposium Finances

The primary goal of the symposium is to be a major scientific success, not to return a surplus. However, it must be run in a financially responsible way and should not make a loss. FME is a non-profit association³ with no significant sources of income other than its symposia. We spend any surplus accrued on other activities to pursue our aims of fostering application, research and international cooperation in formal methods, usually by sponsoring workshops, bursaries, speakers and small projects, to provide a financial cushion for future FM symposia and to cover running costs.

Organisation of the symposium is subcontracted to the host institution on a shared risk basis. A surplus or loss is split between FME and the host in a (negotiable but usually 3:2) ratio, but with an upper limit on any loss sustained by FME (typically € 35000).

A formal budget is drafted for each symposium. The budget is an integral part of the contract between FME and the organising institute. Without an agreed budget, there is no contract.

In order to cover start-up costs, FME can provide a repayable float (usually € 5000) to the local organisers, once the contract has been signed.

We have found that some general budgetary principles help to make for more conferences with fewer nasty surprises. We expect the budget to follow these, and they are listed in Appendix B.

The budget is structured as a balance sheet and a profit/loss calculation. We are happy to supply a template. The balance sheet distinguishes income and expenses with fixed and variable components identified separately for each category. The variable components are parameterized, and these parameters are listed separately. The profit and loss calculation is usually a rough sweep over these parameters, to identify the evolution of the break-even point over different participation scenarios. The items listed in the budget depend on the local situation, but a few of the usual items are listed in Appendix C for convenience. Previous budgets are available on request.

4. Lessons learned

PC Chairs: The number of submissions has been increasing over the last few years. We were taken by surprise in 2003, even with an enlarged PC. With almost 150 submissions, we needed up to 450 reviews (almost always three reviews per paper). You might want to consider pre-vetting abstracts. That was done for FM'15. For FM'09, the PC Chairs went to four reviews per paper - a big help in cases where one review was late or lost.

² The FME board can supply you with the name and contact details of the responsible person at Springer.

³ FME is registered at the Chamber of Commerce in The Hague as an association and operates under the law of the Netherlands.

PC Chairs: You do not have to think up a slogan or theme if you do not want to! Stress any particularly welcome subjects in the CFP. The full spread of subjects will get represented in submissions anyway.

PC Chairs: A physical PC meeting has not been held for many years. PC meetings are usually held electronically. Whichever sort of PC meeting you go for, the costs need to be budgeted.

PC Chairs: Forming the programme – there have been suggestions that we should try to have a package suited to industrial participants who may not be able to attend for more than one or two days. One possible approach is to weight the first day or two with a higher proportion of papers of industrial interest and provide a reduced registration package for these.

Tutorials and Workshops: If you are limited in accepting tutorials or exhibition spaces, use a strict first-come first-served basis and ensure transparency to avoid any risk of dissatisfaction from commercial competitors.

Tutorials and Workshops: Make the proposers responsible, as part of the acceptance criteria for their own proposal, for setting up a web-site and starting their publicity campaign to attract sufficient participants, linking up to the generic symposium web-site and vice versa. Set explicit minimum participation levels for each tutorial and workshop proposal with a hard deadline and communicate these clearly to both organisers and potential participants, to promote early registration. Decide to cancel these events if participation levels are really lagging behind expectations and offer already registered participants the possibility to move to another workshop or tutorial instead or a reimbursement. Only offer to print hand-outs and waive the tutorial or workshop fee to the organiser or lecturer, but do not offer other financial discounts or incentives. Instead, workshop organisers should be stimulated to seek their own event sponsoring (for instance directly from FME) to cover additional cost, such as an invited speaker or a social event.

Tools Presentations: Set aside a room with data projection facilities for tools presentations. Timetable and publicize these.

Sponsor Presentations: In 2003 and 2005, some conference sponsors could buy a space in the programme in which to make a presentation. This was felt to be successful because of the technical strength of the presentations.

OC Chairs: Possible sponsors include

- . BCS-FACS, IEEE, ACM, national computer science SIGs and science foundation
- . Book sellers and publishers (Springer, Elsevier, Cambridge University Press)
- . Local and/or regional Government and major research institutes
- . Local Software Houses
- . International Software/Systems houses specializing in FMs
- . Suppliers of infrastructure (stationary, printing, etc.)
- . Tools suppliers

OC Chairs: Regarding the venue, try to provide some quiet break-out rooms for ad hoc meetings, including chairs and tables!

OC Chairs: The exhibition works best if it is close by the coffee/tea distribution point(s). People tend not to visit the exhibition if it is on another floor some distance away. Understandably, exhibitors want to be close to the delegates and are more likely to participate and pay if they are able to get passing trade at coffee and lunch breaks.

OC Chairs: Remember to supply power supplies and networking facilities (wireless) for exhibitors and participants.

Organisers: Name badges get a lot of criticism. The important thing is not the conference logo, but the name of the participant. Please print the name clearly in large letters and the affiliation below it. Avoid extraneous material.

Organisers: Provide proper logistics and practical information to participants – particularly if the symposium is in an area most participants are unfamiliar with – such as: Contact information to the OC or local staff in case of problems. How to contact police or medical aid. How to travel between the airport, hotel area/city center and symposium venue. What taxi/public transport companies (not) to use, expected cost, how to buy tickets, travel time etc. Map of the symposium venue. Recommended hotels of different price classes with approximate room costs. Local currency and tipping practises. Availability of ATMs and currency exchange offices, acceptance of credit/charge cards. Typical meal costs, where (not) to buy food, whether tap water is drinkable. Usual weather for the time of the symposium. Type of electrical plug, mains voltage and frequency. Places of interest (also for accompanying family members not attending the symposium).

Publicity: Recently, the call for papers has circulated mostly by email. Colour posters have been produced as a general call for submissions and participation. One good idea recently has been to issue a bookmark-sized card with the URL for the conference web site on it. This can be distributed at other gatherings (and even craftily inserted into some other events' proceedings ☺).

Publicity: Advertise tutorials and workshops extensively, both the call for proposals and after a selection has been made.

Appendix A. Reference information

Symposium	Programme Chairs	Invited Speakers
01: VDM '87 (Brussels, Belgium) LNCS 252	Dines Bjørner Cliff B. Jones Mícheál Mac an Airchinnigh	Cliff Jones Dines Bjørner Peter Lucas
02: VDM '88 (Dublin, Ireland) LNCS 328	Robin Bloomfield Lynn Marshall Roger Jones	Donald Good Jean-Raymond Abrial
03: VDM '90 (Kiel, Germany) LNCS 428	Dines Bjørner Tony Hoare	Ole-Johan Dahl Joseph Goguen Reiji Nakajima
04: VDM '91 (Noordwijkerhout, Netherlands) LNCS 551 & 552	Søren Prehn	Michael Jackson Robin Milner John V. Guttag
05: FME '93 (Odense, Denmark) LNCS 670	Jim Woodcock	Cliff B. Jones Antonio Cau Willem-Paul de Roever Peter Lupton
06: FME '94 (Barcelona, Spain) LNCS 873	Tim Denvir	Ralph Back Babak Dehbonei & Fernando Mejia
07: FME '96 (Oxford, England) LNCS 1051	Marie-Claude Gaudel Jim Woodcock	Tony Hoare Terje Siversten Jan Peleska
08: FME '97 (Graz, Austria) LNCS 1313	John Fitzgerald Cliff B. Jones	Hermann Kopetz Loe Feijs Robin Bloomfield
09: FME '99 1st World Congress (Toulouse, France) LNCS 1708 & 1709 (+CD)	Jeanette Wing Jim Woodcock	Tony Hoare Cliff B. Jones Amir Pnueli Joseph Sifakis John Rushby Michael Jackson
10: FME 2001 (Berlin, Germany) LNCS 2021	Jose Nuno Oliveira Pamela Zave	Daniel Jackson Jayadev Misra Simon Peyton Jones

11: FME 2002 (Copenhagen, Denmark) LNCS 2391	Lars-Henrik Eriksson Peter A. Lindsay	Natarajan Shankar (shared with FLoC) Anthony Hall David Basin
12: FM 2003 (Pisa, Italy) LNCS 2805	Keijiro Araki Dino Mandrioli	Kouichi Kishida Brian Randell Gerard Holzmann Jean-Raymond Abrial
13: FM 2005 (Newcastle, England) LNCS 3582	Ian Hayes Andrzej Tarlecki	Marie-Claude Gaudel Chris Johnson Mathai Joseph
14: FM 2006 (Hamilton, Canada) LNCS 4085	Tobias Nipkow Jayadev Misra	Ernie Cohen Nicholas Griffin Thomas A. Henzinger Peter Lindsay George Necula
15: FM 2008 (Turku, Finland) LNCS 5014	Jorge Cuellar Tom Maibaum	Arvind Paolo Bresciani Dawson Engler Schmuel Katz Jayadev Misra
16: FM 2009 2nd World Congress FMWEEK (Eindhoven, Netherlands) LNCS 5080 (+ DVD)	Ana Cavalcanti Dennis Damms	Wan Fokkink Carroll Morgan Colin O'Halloran Sriram Rajamani Jeanette Wing
17: FM 2011 (Limerick, Ireland) LNCS 6664	Michael Butler Wolfram Schulte	Jasmin Fisher David Harel Bashar Nuselbeh Janos Sztipanovits
18: FM 2012 (Paris, France) LNCS 7436	Dimitra Giannakopoulou Dominique Méry	Martin Abadi Asaf Degani Alan Wassyng
19: FM 2014 (Singapore) LNCS 8442	Cliff B. Jones Pekka Pihlajasaari Jun Sun	Gerwin Klein Zhenjiang Hu Jim Woodcock
20: FM 2015 (Oslo, Norway)	Nikolaj Bjørner Frank de Boer	Elvira Albert Werner Damm Valérie Issarny Leslie Lamport

Appendix B: Budget Principles

These principles are based on past experiences (good and bad!). We strongly recommend following them to reduce the risk of unknown unknowns!

- *Be realistic in terms of both expected income and expenditures.* Participation fees should be in line with comparable conferences. We aim to keep fees at broadly the current level or lower, with the aim of increasing participation. Sponsorships account for a significant part of the income; get these committed (in writing) and obtained as early as possible, and estimate a risk that they will not come through. Similarly, verify your expenditures up front by getting quotations from subcontractors and suppliers. Get competitive bids from multiple suppliers if possible, so that you can make good quality/price trade-offs and give some room for negotiation with prospective suppliers. On-site conference registration (and credit-card processing) services have been notoriously expensive at past events. Local applicable taxes must be reflected in the budget.
- *The budget must be defensive and aim for a surplus.* Round all income estimates down but round all expenditure estimates up. Risks (for example: not obtaining the estimated sponsorship fees) must be clearly visible⁴. Include an explicit contingency (usually 5% mark-up on the fixed costs and 5% mark-up on the variable costs). The right sort of surplus to aim for depends on the scale of the event and typically ranges between € 10k and € 25k. As a rule of thumb, the projected budgetary surplus should be roughly equal to the total planned contingency.
- *Make profit and loss calculations for several participation scenarios.* Show explicitly at what participation level the symposium would break even and how these figures evolve when participation levels are both lower and higher than this break-even point. The break-even point should be well within reach, assuming the number of expected accepted papers times 1.5, which provides a reliable lower estimate for the number of fully paying participants, based on previous experience. Furthermore, there may be thresholds in expenditures at certain participant levels (for example: hire extra busses for local transportation to conference modulo 50 participants), these should be made visible in these calculations if the impact is significant.
- *Provide a rationale for the estimates made.* Setting up an FM symposium budget requires making many estimates: the number of expected conference participants (fully paying, early versus late, students), number of accepted papers, number of parallel conference tracks, number of (parallel) tutorials and workshops. It should be clear how these estimates relate to the budget figures used. Numbers from past conferences are available from the FME Treasurer on request.
- *Limit the potential risks in case the event is (or needs to be) [partly] cancelled.* Although this has never happened, and we certainly hope it never will, it is better

⁴ For example, if 5000 Euro is estimated as a target for future fundraising with 25% likelihood, then only 1250 Euro is added as expected income in the budget.

- to be safe than sorry and plan ahead⁵. You can mitigate substantial risks in several ways, for example:
- Make sure all contracts with local suppliers have clear cancellation policies in writing, as part of their quotation.
 - Consider the cancellation and refund policies for participant and hotel registrations; at the very least make sure these are well publicised and that associated expenses are covered.
 - Consider taking suitable event insurance (in particular for third-party liability).
 - Check that institutes (government, national science foundation or trusts) might provide financial backing in case of residual risks like this.
- *Co-located conferences must not increase the organisational risks significantly.* Co-locating FM20XX with other major conferences⁶, either back-to-back or simultaneously, has been a great success in the past. If you choose to do this, it should be clear how the events may interact financially (for example, if shared local services are used). In particular, the FM event budget needs to consider the case where either event is cancelled or is significantly changed. Other examples include registration discounts offered to participants attending both conferences, or contributions owed to the co-located event organisation for services provided.
 - *The FM budget must be in Euros.* If a different currency is used locally, then the associated banking cost and/or exchange rate fluctuations must be addressed.

⁵ For example, international travel was heavily disrupted by volcanic ash clouds over northern Europe in 2010.

⁶ Here we mean full-scale conferences with separate financial management (i.e. participation fees, registration), organisational structure (program committee), published proceedings and so on.

Appendix C: Checklist of Budget Headers

Budget parameters:

- Number of symposium days (typically: 3, Wednesday to Friday)
- Number of expected accepted papers (typically: 32)
- Number of parallel tracks (typically: two)
- Number of half-day workshops / tutorials (typically: 4 + 4)
- Number of full-day workshops / tutorials (typically: 2 + 2)
- Number of (minimum) participants per workshop
- Number of (minimum) participants per tutorial
- Number of invited speakers (typically: one per main symposium day)

Budget estimates:

- Number of fully paying participants. As a ball park figure, assume roughly 2.5 times the expected number of accepted papers, varying from from 70 (Turku, FM 2008, 23 accepted papers) to 160 (Eindhoven, FM 2009, 45 accepted papers). The most recent conference as of this writing had 84 participants (Singapore, FM 2014, 35 accepted papers).
- Ratio of early to late registrations (typically 5:1)
- Number of additional one-day registrations (to specific workshops, tutorials or “Industry day”-only participants, usually 10 to 20)
- Number of student registrations (typically 20 to 40)

Expenditure checklist:

- Conference facilities
 - Room and equipment hire (including beamers, audio equipment)
 - Support staff (security, technical services, student gophers, cleaning)
 - Registration facilities (staff, credit card services, hotel bookings)
 - Internet access for delegates
- Food and Drink
 - Refreshments and snacks (morning and afternoon coffee and Tea breaks)
 - Lunches (including drinks)
 - Social event(s) (location, staff, diner, drinks, entertainment, travel)
- Programme
 - on-line paper submission management system fee (e.g. EasyChair or CyberChair)
 - on-line PC meeting is assumed.
 - budget for invited speakers (basic travel reimbursement and hotel cost). As a rule of thumb FME uses € 1500 per person for intercontinental travel and € 750 for travel within Europe (travel + one night stay).
 - budget for doctoral symposium and Industry Day. If applicable, and preferably covered by sponsoring, basic travel reimbursement and hotel

cost for selected participating PhD students, waiving registration fees for I-Day presenters or other discounts.

- Organising committee
 - Proceedings (ordering and delivery cost). Proceedings are expensive, in particular because of shipping costs. Consider the possibility of not providing printed proceedings for all participants.
 - Conference programme (booklet layout, printing)
 - Publicity (posters [call for participation], banners, signage)
 - Best paper award
 - Travel budget for general chair (e.g. to visit FME business meetings)
 - Registration kits (bags, badges, maps, tourist information)
 - Additional rooms, materials and equipment (i.e. tool exhibition booths)
 - Communication cost (fax, telephone, postage)
 - Reproduction cost (workshop and tutorial proceedings, handouts)
 - Banking cost (credit card payments: estimate 4.5% commission fee)
 - Other out-of-pocket cost
 - Gifts for invited speakers
 - Photographer
 - Event insurance

Income checklist

- Symposium participant fees (proceedings, lunch, symposium, coffee, tea)
 - Early registration (FM 2012: € 450, student € 300)
 - Late registration (FM 2012: € 550, student € 350)
 - Typically, proceedings and dinner tickets are not included in student registration fees.
- Full day workshop/tutorial participation fees (handout, lunch, coffee, tea)
 - Early registration (FM 2012: € 150)
 - Late registration (FM 2012: € 200)
- Industry Day or Doctoral Symposium only fee (lunch, coffee, tea)
 - Early registration (FM 2012: € 100)
 - Late registration (FM 2012: € 150)
- Add-ons
 - Extra proceedings
 - Extra conference dinner ticket (FM 2012: € 80)
- Tools exhibition fees
 - Academic booth / per day
 - Industrial booth / per day

Sponsoring

- Consider a variety of sponsoring opportunities like sponsor packages, sponsoring of specific sub-events like the Industry Day, invited lectures, the social event etc.