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Training

Training Project Plan

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Abstract

The is the Project Plan for the Training project.

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1 Introduction

1.1 Audience

APM Management

1.2 Scope

This document covers all chargeable training courses (including executive briefings, technical seminars, and so on) presented by APM.

It also covers training courses that are taken as consultancy days under the ANSA sponsorship agreements.

It does not cover other non-chargeable presentations (sales presentations, technical seminars, workshops, and conference presentations).

1.3 Status

This is a draft plan for approval by APM Management.

This version of the document includes procedural material that should be transferred to separate documents.

Note: Some of the Appendixes are separate Postscript files and are not part of this FrameMaker document

2 Overview

2.1 Management summary

The objectives of the ANSAwise training project are to:

- service our sponsors' need for training in distributed systems
- service other customers' need for training in distributed systems
- deliver this training via all appropriate channels
- generate follow-on business for APM, particularly in consultancy and project work
- meet the standard APM financial criteria for all projects

2.2 Project activities

The plan covers the following activities:

- course sales
- course marketing
- course scheduling
- course administration
- course development
- course printing and repro
- course QA and assessment

The procedures for each of these activities are described in the chapters below.

3 Training Review of 1995

Note: This is the state as of end Q3 1995

3.1 Training project summary

The 1995 training projects are as follows:

- Training Delivery (70)
- Training Development (71)
- CNET Training Customization (74)

Note that different project code numbers are used in different APM years.

3.1.1 Training Delivery

For a project summary, see [Training Plans].

3.1.1.1 Market

The following training channels and locations were used:

Table 3.1: Training channels and locations

Customers	Type ^a	Relationship	Location	Number of times
BT DRA Eurocontrol GPT	Closed	Direct/Sponsor	Customer site	11
RAF ^b Sybase	Closed	Direct/non-sponsor ^c	APM, Customer site	1 1
PHS Orange	Closed	Indirect/Hoskyns	Customer site	2
General	Open	Indirect/Hoskyns	Hoskyns Training site	1
General	Open	Indirect/Peritas	Peritas Training site	1

a. Closed courses are for a single customer, and multi[ple participants

b. This was held at APM only because RAF Brampton was local, and RAF did not have a room available

c. In 1995 we did not promote direct/non-sponsor courses; these resulted from customers approaching us

3.1.1.2 Course Delivery

Note: This is the state as of end Q3 1995

Table 3.2: Courses delivered

Course Code	Course Title	Days	Customer	Number of times
UDSA	Understanding Distributed Systems Architecture	3	BT RAF	4 1
IA	Introduction to Distributed Systems Architecture	2	Eurocontrol	1
BADO	Building Applications with Distributed Objects	3	BT RAF	1 1
-	Building Applications with Distributed Objects ^a	2	BT	1
IDP	Impact of Distributed Processing	1	Hoskyns	3
-	Introduction to CORBA	1	GPT	1
-	CORBA in Depth	2	GPT	1
TA	Tutorial on Distributed Architecture and Standards	1	Sybase Eurocontrol	1 1
WDAA	Writing Distributed Applications Using ANSAware ^b	2	DRA	1

a. This is a 2-day variant of the 3-day course. It was planned, but not allocated a separate course code

b. See §3.1.2.1 *Course development*

Table 3.3: Training Days Delivered, by customer and month

1995	BT	DRA	Euro_control ^a	GPT	RAF ^b	Sybase ^c	Hoskyns ^d	Peritas ^e	Total
Jan	2								2
Feb	4								4
Mar									
Apr	3							2	5
May	3						1		4
Jun									
Jul ^f	3								3
Aug ^g	3			3			1		7
Sep					3	1	1		5
Oct		1	3		3				7
Nov	2	1							3
Dec									
Total	20 ^h	2	3	3	6	1	3	2	40

a. See [Eurocontrol Proposal]

b. See [RAF Proposal]

c. See [Sybase Proposal]

d. Includes on-site courses; only 1 day was a public course; other courses were cancelled

e. Only course was the Networking '95 event; other courses were cancelled

f. July and August were not expected to have any courses delivered, because of the summer break

g. July and August were not expected to have any courses delivered, because of the summer break

h. Note that BT took half of the total days delivered

Table 3.4: Training Days Delivered, by presenter

1995	cmm	msm	Total
Jan	2		2
Feb	4		4
Mar			
Apr	5		5
May	4		4
Jun			
Jul	3		3
Aug	7		7
Sep	5		5
Oct	5	2	7
Nov	3		3
Dec			
Total	38	2	40

Note: A table of actual number of participants per course would also be helpful for making pricing decisions; see below

3.1.1.3 Course Pricing

Note: Only the pricing for courses actually delivered is shown

Note: Include competitor pricing here

Table 3.5: Course pricing for closed courses

Course Code	Course Title	Days	Sponsor Rate	Non-Sponsor rate
UDSA	Understanding Distributed Systems Architecture	3	3750	4250 ^a
IA	Introduction to Distributed Systems Architecture	2	2500	2800
BADO	Building Applications with Distributed Objects	3	3750	4250 ^b
-	Building Applications with Distributed Objects ^c	2	2500	2800
IDP	Impact of Distributed Processing	1	N/A	1500
-	Introduction to CORBA	1	1250	N/A
-	CORBA in Depth	2	2500	N/A
TA	Tutorial on Distributed Architecture and Standards	1	1250 ^d	1500 ^e
WDAA	Writing Distributed Applications Using ANSAware ^f	2	TBD	TBD

a. This is not the rate that was actually used for some direct/non-sponsor courses

b. This is not the rate that was actually used for some direct/non-sponsor courses

c. This is a 2-day variant of the 3-day course. It was planned, but not allocated a separate course code

d. The sponsor may elect to take the one-day course as a consulting day within the ANSA contract

e. This is not the rate that was actually used for some direct/non-sponsor courses (lower maximum number of people attending)

f. See §3.1.2.1 *Course development*

3.1.1.4 *Comparison against plan*

The [Training Plans] quote planned income, rather than days delivered. This comparison is TBD.

3.1.1.5 *Customer feedback*

All courses collect feedback from participants. We have statistical analyses from each course, but overall analyses for 1995 are TBD.

The qualitative feedback for the courses Understanding Distributed Systems Architecture and Building Application with Distributed Objects was analysed and correlated with a review of the course content by members of the ANSA project; the conclusions for course structure and content are given in [Feedback analysis].

At one of the ANSA Technical Committee meetings, a brief survey was circulated, suggesting topics that could be covered. 3 forms were returned.

3.1.2 **Training Development**

This project consists purely of effort developing and maintaining the course content. For a project summary, see [Training Plans].

3.1.2.1 *Course development*

The following new courses (not in [Training Plans]) were developed, reusing material from other courses:

- Introduction to CORBA
- CORBA In Depth

The course Writing Distributed Applications with ANSAware was developed in a slightly different structure from that originally planned. It now consists of a 1-day introduction (not hands-on), and a 1-day hands-on practical exercise. The practical exercise was developed for CNET (§3.1.3 *CNET Training Customization*).

The following courses were not developed:

- Developing Manageable Distributed Applications (DMDA, hands-on)
- Design and Engineering of Distributed Systems (DEDS, hands-on)
- ANSAware 4.1 In Depth (AD)
- ANSAware/RT (AWRT, hands-on)

3.1.2.2 *Quality levels*

These are TBD.

3.1.3 **CNET Training Customization**

This is TBD. Refer to [CNET Proposal].

3.2 **Conclusions**

3.2.1 **Customers**

BT took 20 training days; we planned for 12. Other sponsors are expected to take 8 training days; we planned for 12.

- For 1996, repeat sponsor business must be planned to be lower than 1995. [Training Plans] states:

“We expect to have covered this market by the end of 1995 with a much smaller repeat business in 1996, unless significant new material is presented.”

Only 5 training days in total were delivered via Hoskyns and Peritas.

- For 1996, increased business via this channel will require new products and promotion

All the training was delivered in the UK, except for Eurocontrol (a sponsor).

- We need a plan for tackling the European market, including exploiting the French translation being carried out by CNET
- We should consider how North America and the rest of the world could be tackled. We have had several one-off enquiries

3.2.2 Product

Apart from BT, there is a fairly even spread of courses actually delivered.

- Our range of published courses appears too wide, and invites confusion. We should have no more than 5-7 offerings, but promote their customization
- 3-day courses are too long

3.2.3 Price

For direct customers, there is no evidence that they are discouraged by our pricing. (For indirect customers, Hoskyns and Peritas set the prices and we collect an agreed price percentage).

Sponsors are taking the 1-day free under the sponsorship consultancy days. This is beneficial, but affects our income!

3.2.4 Place

Our customers require on-site training (to minimize their costs)

- For 1996, most of our courses must be planned to be on customer site. This has some implications for our effort and materials costings

3.2.5 Promotion

- Brochures
- Web (as distribution mechanism for queries via Donna). Also link to partners)
- ANSAwise branding
- Titling; ‘distributed processing’ and Hoskyns comments

3.2.6 Partners

3.2.7 Positioning

?Competition

- **Need to tidy up course codes and streamline administration**

4 Training Plans for 1996

4.1 General Recommendations

Note: These recommendations are provisional, and for further discussion

- Maintain channels via Hoskyns and Peritas (with improved collateral)

4.2 Training Delivery Forecast

- Scenarios (no change), sponsors, ObjectLab etc.

5 Course Sales

Note: Information in this and subsequent chapters is very out of date . It should be updated and transferred to other documents as appropriate

Note: Include policy statement from my e-mail about channels etc.

5.1 Summary

Courses are sold via the following channels:

- directly to organizations and individuals. Sales to sponsors are via this channel
- indirectly via other third-party training organizations

In all cases the courses are developed and presented by APM. We have no plans to sell on course material to other organizations, or to train trainers in other organizations.

Other training organizations mount seminars in partnership with local academic institutions (e.g. the ATM course organized by Technology Appraisals with the Cambridge University Programme for Industry). We have no such plans at present.

5.1.1 Direct sales

In this case, APM contact the customer directly. APM handle all the course administration ourselves.

These sales are handled by the Training Manager with help from the Business Unit Administrator

Direct sales may be either:

- standard courses
- customized (bespoke) courses

We prefer to sell a course to a single customer as this simplifies our administration. Normally this means that some customization is required. A customized course would probably be for a single customer. Other advantages include:

- lower overheads
- more price control
- avoidance of channel conflict
- flexible strategy
- better route to market
- customization is the trend; it is what our customers want

5.1.2 Indirect sales

In this case, the third-party training organization handles all the marketing, day-to-day course administration, handling the individual bookings, and so on

From the APM point of view, the sale is to the third-party training organization. These sales are handled by the Training Manager only, including the qualification, selection of, and negotiation with, these organizations.

Issues here include exclusivity; this is TBD.

5.2 Course sales procedures

This section covers outbound sales only. For inbound enquiries, see §7 *Course Scheduling*.

5.2.1 Contact identification

Generation of prospects through mining past contacts is TBD. It will probably be a subset of the mailing list used for ANSAworks '95.

5.2.2 Phone call scripts

Initial contact is always via phone.

A basic sales script is needed; this is TBD.

For general advice on sales by phone (reaching the decision maker, and so on), see TBD.

5.2.3 Phone call and meeting records

This is TBD.

Use of e-mail (and archive) is TBD.

5.2.4 Contact management

Since at least two people will be involved in direct sales, possibly to the same organization, coordination is essential. This is TBD; it will involve generating a basic sales presentation for training.

6 Course Marketing

6.1 Summary

Courses are marketed via the same sales channels:

- directly to organizations and individuals. (Sales to sponsors are via this channel)
- indirectly via other third-party training organizations

The most urgent issues for course marketing are:

- identifying what material we have, checking content and status
- some marketing material has not yet been written; this needs to be defined (e.g. course schedule with dates in it)
- updating and document control of course brochures and marketing material
- being able to answer satisfactorily the questions listed in §14 *Appendix - Course Marketing Questions and Answers* below

6.1.1 Direct marketing

The following approaches are used:

- direct mail to known contacts
- free announcements in the trade press

In the future, we may also place course details on our World-Wide-Web server. This is TBD.

We have no plans to use telemarketing or paid advertising.

We have no plans to target particular vertical markets.

6.1.2 Indirect marketing

In the indirect case, the third-party training organization handles all the marketing. The following need to be agreed with each such organization

- course title
- course outline
- course duration and schedule

Indirect marketing may require extra material to that required by direct marketing; this is TBD. How much the course content we will disclose is TBD, and will be handled as it arises.

If the same course is being sold indirect via different organizations (or also directly), there is a potential conflict. This may require a different course title, different course, and potentially variation in course content. This is TBD (the Training Manager to resolve). The policy for passing on referrals to each third-party training organization is also TBD. If the third-party training

organization is part of a company that also has relevant products, it may be necessary to link these into the course (by detailed coverage, or demonstration). This must be done by course customization (see below)).

6.1.3 Customized courses

These are TBD. APM have already provided customized courses for:

- GPT Video Systems (see [GPT])
- Telefonica I+D (see[Telefonica])
- BT

APM also proposed a complete course programme for BNR; unfortunately this proposal was not accepted [BNR].

There is also the potential need for APM to provide courses to support sponsors' own marketing programmes (sometimes called 'marketecture'). The course participants would be the sponsors' customers. Although these courses would not be fully customized, they would need to be aligned with the sponsors' marketing programmes, and have appropriate coverage of sponsor products. This is TBD. It would also be possible to provide the same service for non-sponsor product vendors, if they need this kind of quasi-independent training service.

6.1.4 Identity and branding

We have settled on the name 'ANSAwise' for training. Apart from standardizing the ANSAwise logo (this is TBD), there are no further issues here.

6.1.5 Standard terms and conditions

We may need to vary these in the light of experience, but they should be the same for all courses

- Course places can be reserved by telephone but cannot be guaranteed until confirmed in writing or by fax [or by e-mail?]
- All course places must be confirmed in writing or by fax [or by e-mail?] before the course starts
- Once confirmed, course places cannot be cancelled and payment will always be required [This policy is easier to administer than an administration fee or credit note, albeit rather strict.]
- Substitutions of participants may be made at any time
- Our payments terms are 28 days from invoice. An invoice will be issued 28 days before the course starts, or immediately on receipt of booking if less than 28 days before the start of the course

Terms and conditions for on-site courses, and third-party training organizations are TBD.

6.1.6 Feedback assessment

Up till now we have not attempted to modify our marketing by assessing:

- feedback from courses actually delivered
- the effectiveness of previous marketing attempts

- other direct customer contacts

This is TBD.

6.2 Marketing procedures

6.2.1 Market analysis

The following organizations are market leaders (benchmarks)

- QA Training
- TBD

The procedures for analyzing the market and the offerings of these players is TBD.

The procedures for us carrying out our own surveys are TBD.

6.2.2 Course scoping

The course scope defines:

- course audience (profile and expectations)
- course type (whether intensive, hands-on, or briefing)
- maximum number of participants (determined by location, audience, and course type)
- course title
- course outline
- course duration and provisional schedule
- course progression (relationship to other courses within the programme)

According to training professionals, it is crucial to select the right course title. The course title makes a big difference to the response rate. Training organizations deliberately experiment with different variations on the course title, and monitor the effect. Our use of this is TBD. A different title should be used for different content.

For general advice on course titles, see [Workshops], section 3.

It is also crucial to determine the appropriate launch timing, anticipating when a course scope will be 'fashionable'. (Being too far ahead of the market is a potential problem for us.)

If there are variants of the course (say 1-day, 2-day, 3-day), these variants must be scoped separately for course audience profile and expectations.

The course type affects the number of participants as follows:

- intensive courses are continuous hands-on courses for novices. Each participant would require a machine. There would be a maximum of 6 participants, since the presenter would be continually helping the participants. We do not expect to offer this type of course
- semi-intensive courses have a large proportion of hands-on. Participants would be expected to be self-sufficient in basic operations. There would be one machine between two participants. There would be a maximum of 12 participants.

- non-intensive courses would be up to 25 people. There would be no hands-on

The sign-off procedure for the course scoping is TBD.

6.2.3 Course pricing

This is TBD. It will cover the definition of threshold number of participants for

- break-even

and also for

- worthwhile profitability

If the maximum number of participants depends on the location, these thresholds must be defined for each location.

Some organizations (PA Consulting, for example), think that executive briefings are sales presentations, and should therefore be free. Demarcation is TBD.

6.2.4 Course brochures and other marketing material

An initial ANSAwise course brochure was produced (see [ANSAwise]). This document is now out of date, and is difficult to update, being in FrameMaker format.

The issues that arise are:

- overall format
- style and presentation (need for guidelines)
- choice of DTP/work processor
- brochure document control, approval and QA process
- stock control and costings

These are issues for marketing material generally, but are particularly important for such an active area.

Marketing material does not have to be solely sales information. A colourful poster/wallchart that illustrated distributed systems concepts would be a general sales aid that is equally valuable to training (see example from IBM).

We need to view the complete set of marketing material; this is TBD.

6.2.5 Mailing list

Note: This should be transferred to APM.1391

The procedures for reviewing the APM training mailing is TBD. This should be handled as part of the mailing list review generally, and coordinated with the mailing list review for ANSAworks '95.

We have purchased mailing lists for other purposes; their further use is TBD.

Incorporation of referrals via other contacts is TBD.

We need to ensure we comply with legislation and acceptable use policy (e.g Data Protection Act, Internet AUP).

6.2.6 Mailshots

All mailshots are handled by APM.

Improving the efficiency of mailshots is important for APM. The issues are:

- timing
- coordinating with other related mailshots (Technical Committee/ Management Committee, ANSAworks)
- which parts of the mailing list to include
- amount of effort to do a mailing

We have included ANSAworks information in third-party mailings (OMG). We have no such plans for ANSAwise.

(Past general mailshots from APM have not been particularly effective.)

We do not plan to carry out mailshots via e-mail. (It may not reach the right audience; this is TBD.)

6.2.7 Related APM marketing

Coverage in other APM marketing (for example, at ANSAworks) is TBD.

Coverage in the APM WWW page is TBD. (Also links from other sites).

Leaving or information at exhibitions is TBD.

6.2.8 Publicity in the trade press and professional journals

Free announcements will be placed in:

- First Class
- Computer Weekly
- Computing
- Communications News

The procedure for keeping these entries up to date is TBD.

We will monitor inbound enquiries to see if this approach is worth the effort.

Occasionally, some magazines run survey features on training, possibly as part of a general feature on distributed systems. It is TBD whether this is worthwhile, and also TBD how to get included in such features.

In the long term, for paid advertising, we might consider:

- The Computer Bulletin (but long publication dates)

6.2.9 Local publicity

We might want to consider local publicity via the Cambridge academic and industrial community. It is not clear that this is worthwhile; this is TBD.

6.2.10 Inclusion in training registers

We will register with the IEE CPD (Continuous Professional Development) scheme; this is free.

It would be valuable to be included in general lists of IT training companies; in handbooks, yearbooks, and so on. This is TBD (we don't yet know which of these are important, and which are not).

This might help us get plugged into a network of other training companies (so we can take referrals from them).

Inclusion in the Directory of Object Technology is TBD.

7 Course Scheduling

Note: Include planning here (but no budgets)?

Note: Include estimation here?

7.1 Summary

Course scheduling is controlled by the Training Manager. It is determined by:

- customer demand (forecast and actual)
- presenter and location availability
- course content availability
- other factors (gapping between courses; blackout days around Christmas and Bank Holidays, begin/end of week, TINA/OMG/ITU meetings, budget seasonal factors, allowing space etc.)

All courses are scheduled together, including those run by third-party training organizations.

7.2 Scheduling procedures

7.2.1 Course timetabling

We don't yet have a lot of expertise in scheduling course development in parallel with running existing courses; knowing what an 'ideal' workload is for a developer/presenter, and so on. This is TBD.

Note: We do now. This should be included here.

We need a least a rough approach, for example:

- never scheduling more than one course in a week, in particular, never simultaneously
- avoiding scheduling courses in consecutive weeks (unless known to be presented by different people)
- never scheduling two presentations of the same course via the same channel closer than 6 weeks together

Note: Remember to account correctly for courses scheduled across a month boundary.

Supplying an updated timetable to course administration is TBD.

It is TBD how much influence third-party organizations have on the dates we offer (whether they can merely advise). Third-party organizations may be able to advise on how often to run courses on a particular topic at a particular level.

7.2.2 Course forecasting

We do not yet know how rapidly public courses tend to fill up, and hence how often to run them, or how full they are expected to be. We don't have much expertise at this yet; it is TBD.

The procedure for deciding whether to defer, merge, or cancel courses is TBD.

7.2.3 Course location selection

In some cases, the choice of location (but not the date) depends on the number of people actually attending the course. This aspect of course scheduling is also controlled by the Training Manager.

A decision has to be made when to book the location. The timing and the procedure for this is TBD.

7.2.4 Course presenter availability

We need to allow for standby presenters (in case of illness etc.). Also scheduling more than one presenter.

The also requires training-the-trainer. (This process, including preliminary background reading, needs to be documented.)

8 Course Administration

8.1 Summary

Course administration is controlled by the Business Unit Administrator. It includes the initiation of invoices (but not tracking them).

The urgent issues for course administration are:

- identifying what other documents etc. need to be in place (e.g. letter templates) before this procedure is complete
- timetabling the activities for each course presentation (what to do, when, and by whom)
- how we cross-check to make sure that all the paperwork is in order

Note: Since we intend to minimize our course administration overheads, we plan that all bookings for individual course places are referred to third-party training courses. The procedure below is only intended for use until the end of 1994.

Note: There is still some course administration to be done for indirect courses; this should be described here

8.2 Administration procedure summary

Course administration data is held in the following places:

- Course details file (changes infrequently)
 - course flyers and information pack contents (masters)
 - course schedules
 - other course background information (including contractual information)
- Course booking file (changes frequently)
 - course booking status
 - correspondence
- ACT! database
 - contact information
 - mailing list

Coordination with e-mail within the Business Unit is TBD, for instance:

- routing of incoming e-mail enquiries
- archiving of e-mail
- e-mail templates

8.2.1 Customer telephone calls

First, determine whether the call is a:

- course enquiry
- course booking (firm or provisional)
- course booking alteration or cancellation
- course administration query

The following calls must all be referred to the Training Manager:

- pricing negotiations (for block bookings etc.)
- detailed enquiries about course content
- on-site or customized courses
- third-party training courses
- complaints
- other calls TBD

8.3 Course enquiries by phone

For a general enquiry, the procedure is as follows:

1. Ask if they have been in contact with APM before
2. Check whether we have had previous contact with their organization, specifically with regard to training (there may even be previous course bookings)
3. Obtain the standard contact information:
 - full name
 - company name and address
 - company phone and fax number
 - e-mail address (if any)
4. Ask if there is a particular course they are interested in
5. Ask how they found out about the course
6. Ask if they wish to be put on our mailing list
7. Ask if any else in their organization would be interested in course information
8. Send a standard course information pack
9. Update ACT! with the standard contact information

Note: ACT! is no longer used

(We may choose distribute course mailings to some people via e-mail, but these won't look very attractive in the form of bare ASCII; this is TBD.)

Note: Bellcore use course mailing via e-mail to fill internal courses at short notice

8.4 Course bookings

These only apply to standard courses; on-site and special courses are TBD.

8.4.1 Provisional bookings by phone

For a provisional booking, the procedure is as follows:

1. Ask if they have been in contact with APM before
2. Check whether we have had previous contact with their organization, specifically with regard to training (there may even be previous course bookings)
3. Obtain the standard contact information:
 - full name
 - company name and address
 - company phone and fax number
 - e-mail address (if any)
4. Ask which course title they require, and the date they wish to attend
5. Check whether there are enough free places
6. If not, ask whether they wish to attend an alternative date (if one is scheduled, and there are still places free). Also ask whether they wish to be put on standby for the original date
7. Ask if they personally will be attending the course, or whether the booking is being made on behalf of someone else, or whether they simply want a number of places.
8. Update the course booking form

Note that there is no upper limit on the number of provisional bookings that we will accept per course.

The procedure for contacting people to convert provisional bookings to firm bookings (what threshold? what date?) is TBD.

Handling of preferences/alternative bookings, and also of group bookings (e.g. “these 3 people must attend the same course presentation”) is TBD.

8.4.2 Provisional bookings other than via phone

We can accept provisional bookings via any means (letter, fax, e-mail).

1. Check whether we have had previous contact with their organization, specifically with regard to training (there may even be previous course bookings)
2. Check that it is clear which course title they require, and the date they wish to attend
3. Check whether there are enough free places. If there are not, check alternative free course dates and phone them back, and proceed as described above
4. If there are enough free places, respond with a Provisional Booking response letter.
5. Update ACT! with the contact information
6. Add letter, fax, or e-mail to course booking file

8.4.3 Firm bookings

Firm bookings require one of:

- purchase order number, cheque, credit card details, or other approved means of payment
- letter from organization's Training department
- special approval from Mike or the Operations Director

It is TBD whether we can accept credit card details over the phone?

Firm bookings cannot be accepted by phone (except by special approval?).

Credit check (and other status checks) are TBD.

For a firm booking, the procedure is as follows:

1. Check whether they have already made a provisional booking. If so, check that the provisional bookings are held, and that they want the same number of places as were provisionally booked
2. Ask if they personally will be attending the course, or whether the booking is being made on behalf of someone else, or whether they simply want a number of places. If the booking is being made on behalf of someone else, record the standard contact information for each person separately
3. Ask if there are any special participant requirements, for example:
 - building access for those with a physical handicap
 - dietary needs
 - other special needs

Record these on a note with the course booking sheet.

4. Obtain the purchase order details:
 - purchase order number
 - full name of accounts department contact person
 - company name and address
 - company phone and fax number
 - company VAT number
5. Update the course booking form
6. Add letter to course booking file

8.4.4 Standby bookings

We do not publicize this, but we will accept standby bookings on any course presentation that is full.

It is TBD whether we accept standby bookings via phone.

Standby bookings are not necessarily eligible for the same discounts; this is TBD.

8.4.5 Booking alterations

Determine whether the alteration is a:

- substitution of participant
- transfer of course
- booking cancellation

Substitutions are allowed at any time.

For a substitution, the procedure is as follows:

1. Update the course booking form
2. Add letter to course booking file
3. If joining instructions have already been sent, send joining instructions to new participant

Transfers to another course presentation are TBD and should be passed to the Training Manager (treat case by case?)

For booking cancellation, see below.

8.4.6 Booking cancellations

There are no refunds for cancellations.

For a cancellation, the procedure is as follows:

1. Update the course booking form
2. Add note to course booking file

Refer any troublesome cases to the Training Manager.

8.4.7 APM-initiated course changes

APM-initiated changes include:

- change of location
- move to a different date
- cancellation/deferral
- others TBD

We need to make sure that these only affect the customer when this is entirely unavoidable; procedures here are TBD.

We do not publicize the name of the presenter, so change of presenter does not matter.

Changes to the course schedule (future timetable) are handled by a procedure TBD.

8.4.8 Joining instructions

Joining instructions are sent to participants TBD (2?) weeks before the course. These must cover:

- location, date etc.
- pre-course exercise and study material

We can't in general send them out at the same time as the invoice (4 weeks before the course would be too soon for joining instructions, unless the course is already full). This is TBD.

8.5 Invoicing

Invoices are sent out 4 weeks before the course (or immediately, if the booking is made less than 4 weeks before the course).

We should send out one invoice per course, per organization (not per booking). This must be made clear on the invoice.

The course presenter needs to know which participants have not paid at the point the course starts. (It is TBD what happens for such participants.)

8.6 Course-specific documents

These include:

- participant list

How far in advance to prepare this is TBD.

We won't print attendance certificates (these are patronizing).

8.7 Cross-checks and procedural audits

This is TBD.

8.8 Procedural automation

The following are TBD:

- potential use of ACT! to track prospects
- potential use of ACT! to generate other correspondence
- potential use of ACT! for course timetable (need a dummy user); or perhaps Microsoft Project

Note: A better approach is still needed. Much is handled via ad-hoc e-mail

- report generation/printouts/integration with Excel

A more sophisticated course booking system is TBD (perhaps using Microsoft Access).

9 Course Development

Note: [Need to incorporate various e-mail notes here]

9.1 Summary

See also [BNR] for detail of the originally planned course development process.

The deliverables are associated with either:

- a module (description, slides, exercises, and so)
- a course (description, handouts, and so on)
- the ANSAwise project as a whole (plans, standards, and so on)

The deliverables must:

- fill the course outline
- be able to be presented by any APM trainer without special briefing on the course content
- be modular and therefore reusable
- meet APM quality standards

The course development process must also allow course development by several people in a team, while still maintaining consistency.

Note: [Need an overview of the course development stages here]

9.2 Development techniques

Training is more demanding than giving individual presentations because

- People are paying to listen to you
- People are expected to participate
- People may react differently to being trained (some resent it; you can get troublemakers: they average 1 in 100)

It is said that course quality is more important than quantity. But you need the quantity in reserve; there must be enough course material to allow for course participants that go through it quickly.

Advice and guidance in developing technology transfer APM-style training courses is scattered and hard to find. This is partly because:

- many other training courses are aimed at changing attitudes and behaviour through facilitation, rather than teaching skills and knowledge. (Techniques such as role playing are not relevant to us)
- training courses that teach skills in the use of a particular product

- little technical knowledge is assumed (either on the part of trainer or trainee)
- most advice is aimed at in-house trainers

But there is some relevant advice on:

- overall course analysis and design (see TBD)
- course assessment (see TBD)
- giving presentations generally (see [Presentations Plus])
- ideas for getting attention and keeping interest (see [Workshops])
- specific do's and don't's (see TBD)

Specific techniques used in course development are TBD, but may include

- information mapping
- storyboarding
- brainstorming
- benchmarking (competitive evaluation)

9.2.1 Information mapping

More systematic principles are needed for course design.

These are the principles of information mapping:

- analysis of audience
- purpose and types of information
- organization of information and structure of documents
- presentation of information and documents

The types of information are:

- procedure
- process
- fact
- principle
- structure
- concept
- classification

9.3 Style and consistency

The usual rules in [APM Document Writing] apply.

Additional checks are needed for course style and consistency, to cover

- extensions to APM's house rules for new presentation media and applications (e.g. PowerPoint)
- incorporation house rules. for marketing material
- rules on use of colour

Note: [Need to cross-reference standard design reference works here...]

9.4 Course handouts

Note: Shift to the Marketing chapter because course handouts are deliverables?

Carefully chosen additional course handouts need not be expensive. They:

- reinforce the course materials by providing independent evidence
- can cover interesting peripheral topics that don't merit a place in the course itself
- can cover more theoretical material than would be appropriate for the course itself
- can offer a contrasting or controversial point of view that would be disruptive in the course proper
- balance the overt APM sales literature, giving a lasting impression of impartiality
- can be very up-to-date (possibly even more so than the course material!)

Course handouts should include:

- all the course materials: slides, exercises, answers, etc.
- state of the art
 - reprints of important technical and managerial journal papers (nominally 5-10 per course day)
 - reprints of APM public documents
 - a bibliography
- state of the market
 - selected third-party consortia or product sales support literature and position statements ("white papers")
 - reference materials written specially for the course (glossaries, implementation checklists, and so on)
 - reprints of product surveys

Criteria for selection are:

- is there a better paper?
- is there a newer paper (must be within the last 5 years unless it is a classic)
- is there a more appropriate paper?
- is there an APM paper covering this?
- is there a non-APM paper covering this?

Copies of standards are probably too expensive and inappropriate (too specialized).

Copyright issues are TBD. (For example, buying reprints, or buying rights to reproduce. Availability may be a problem too.)

The reprints should be vetted for technical quality by a senior member of the Research Unit. We may wish to issue a "Call for Papers" to the Research Unit for suggestions; this is TBD. (Need a checklist for vetting.)

In future it may be preferable to supply some of this information on disk (for ease of searching). A pointer to a WWW page may be preferable; this is TBD.

In future we may also choose to give away a relevant textbook or reference work (say, one of the CORBA specifications) as part of the course material. It must be an up-to-date and technically stable book. The cost implications are TBD. [But in any case, these textbooks should be made available for browsing during course breaks.]

The course handouts must be tied to a particular course; you must not hand out the same reprints on two different courses in the same series.

Reference information may be in slides or handouts; a choice needs to be made for each course.

9.5 Course development procedures

Courses are built from a pool of modules.

9.5.1 Planning and estimation

This is TBD.

One university semester = 1 40-hour working week

9.5.2 Document templates

9.5.2.1 *Presentation templates*

These are TBD.

Although they can be based on the APM FrameMaker templates, changes will be needed to cover:

- PowerPoint formats
- inclusion of copyright notice
- ability to use as colour OHP slides and also as electronic presentation
- possibility of (highly selective) printing on in-house colour printer

9.5.2.2 *Exercise templates*

These are TBD.

Note: A process description is required here. This needs to cover the filing and document control, e.g. markups for mistakes, and snippets/cuttings for updates

9.5.3 Course description

[This is complex enough to require a document template itself?]

There is one course description per course.

[The course outline used by Marketing may be less detailed than similar outlines produced by other organizations]

The course description produced here is more detailed than the course outline used by Marketing in brochures. (However, the course description may be supplied to third-party training organizations to help sell the course to them.) The course description differs in that it:

- allocates specific topics to specific modules. (The Marketing outlines describe topics in the order most likely to attract customers.). This will include demonstrations of specific products.

- uses standardized terminology
- identifies an opportunity and need
- contains a course roadmap with the running order for the modules, and also showing the timings for each module
- lists the key concepts to be conveyed
- lists qualifications for the course presenter
- lists the hazards and pitfalls for course presenter (the course description is the basis for training-the-trainer)
- identifies a major case study or a example around which the course is base
- list the exercises (there should be at least 2 hours per day, a minimum of 2 sessions)
- lists the topics that are excluded from the course
- identifies any course handouts that must be written (e.g. a new ANSA White Paper)
- identifies equipment and technical facilities required (e.g. for product demonstrations)
- identifies external dependencies (e.g. C++, general OO, database)
- identifies topics where APM are lacking in information or expertise

Each module is identified as:

- core
- optional

Course descriptions are also produced for custom courses. They may form part of a course proposal, or may be generated as a project deliverable.

Modules are about 1 hour each. (This is actually rather too long.) (Typical courses plan 4 sessions of 1.5 hours each per day.) They can be assembled (but not arbitrarily) to form courses. Typically, modules would be paired into a half-day session. (They might be complementary or contrasting.) Hands-on sessions may be deliberately split across a lunch break, or a day break, to allow participants to work through them if they wish.

A typical format might be

- Morning: 1 hour talk, 1 hour exercise
- Afternoon: 2 hour exercise, 1 hour talk

Some modules may be intended for a specialist audience (e.g. telecomms). This is TBD. (See APM survey results, for instance.)

Exercises should be reviewed collectively

Note: Reviewers; should they have read standard material first?

Refer to §15 *Appendix - Course description review checklist*.

9.5.4 Module description

Note: [How useful was my approach of title+bullets; either as a start for brainstorming, or for getting to the next stage of module description?]

Roughly a page per module (corresponding to abstract+references for an ordinary document). This should be transformable into the FrameMaker cover page.

Needs Title+subtitle. See [Workshops]; (e.g. 'Tutorial' is better than 'Introduction' or 'Overview').

Highlight the keywords/buzzwords

If we're working on a 1-10 ratio, the module description itself should take about an hour to write.

This may be usable directly as a outline for the presentation, but maybe not

Need to reference sources of raw material (e.g. APM documents, reference works, etc.) Also need specific diagrams, examples, facts, evidence, anecdotes, etc. Identify areas needed for research (even when you know what you are talking about, you may need to research your facts.) This information must be actively traweled for.

There is now enough course material that it is difficult to find your way around it. How is this to be solved?

Should the Module descriptions be in a single document or in separate documents? (The topics-and-modules and case-studies-and-exercises were a convenient way of accumulating information.)

Need additional back-up slides for specific questions; you select up-front which you present, and which you hold back.

Each module can consist of:

- lectures
- demonstrations
- case study paper exercises
- discussion groups and workshops
- hands-on exercises

In some cases a module will be an adapted conference paper or internal APM presentation.

List the key questions that will be answered by the module.

Acid test; suppose you were considering a standard or product; what information would you need:

- to decide whether the approach was valid
- to convince others
- to actually start running a project that used it (forming a team, etc.)

9.5.5 Exercise description

Keep the first exercise in a course short.

9.5.5.1 Exercise length

Exercises can be of 3 lengths:

- in-module
- full-module
- multi-module

9.5.5.2 *In-module exercises*

These can take up to 10 minutes. They have the benefit of:

- reinforcing a single important point
- adding variety
- getting participants involved
- being tied tightly to a particular module

Because in-module exercises are short, it is possible to be experimental with them. If an in-module exercise misfires with a particular audience, it is possible to cut it short and carry on. (This isn't an excuse for failing to dry-run a module, though. It is also important that participants still feel that they have a 'safe place to fail' - don't be that experimental!)

In-module exercises can be designed late on. It is sufficient to identify the need for an in-module exercise in the module description.

9.5.5.3 *Full-module*

This is TBD.

The description must cover:

- exercise setting
- format

9.5.5.4 *Multi-module*

This is TBD (APM do not plan to use multi-module exercises at present.)

9.5.6 **Demonstration description**

This is TBD (APM do not plan to use demonstrations at present).

Demonstrations are treated as modules in their own right.

(If we wanted to demonstrate 4 products:

- which would they be?
- can we get hold of them free of charge?
- what hardware and facilities would be necessary?

9.5.7 **Case study description**

[See also awards application for information needed for case studies]

[Note: not the same as a case study write-up produced for marketing material]

Note: Maybe merge these with exercises

Setting/Background

Problem description

Analysis

Significant features

Solution proposed

- which was adopted

- which was rejected

Outcome

Note: Some of the above may be unavailable

9.5.8 Course dry runs

Need procedures for these (including candidate selection)

9.5.9 Course bill-of-materials

The final course description also lists the handouts (bill-of-materials) for repro (See section above).

[Or keep this as a separate deliverable? It will be generated late on.]

9.5.10 Course update/module selection

9.5.11 Course self-study material

Although APM have proposed self-study material ([BNR]), we do not plan to generate it as part of current courses. It is therefore TBD.

Could do multiple-choice (CACM self-assessment, or CNE assessment).

10 Course Printing and Reprographics

Note: Should also try to align these (and perhaps chapter headings) with the sections in [BS 7649]

10.1 Summary

This covers:

- course marketing material
- course correspondence
- course material

We plan to copy all material in-house, except where otherwise stated.

10.2 Printing procedures

10.2.1 Document formats and templates

This is TBD.

Note: IONA's A5 size course manuals are quite nice. They would fit in an

10.2.2 Document version control

This is TBD.

For document approval and withdrawal procedure, see TBD.

10.2.3 Document printing and copying

This is TBD.

Note: Need reference to standard APM printing and copying procedures

For printing, need to be sure of:

- correct file containing document
- correct (version of) software to print it
- correct printing options
- correct printer
- correct paper (in paper tray)

For copying, need to be sure of:

- correct master document
- correct side-side and reduction ratio (if necessary)
- correct paper

10.2.4 Packaging and assembly

Course materials require a bill-of-materials and an assembly procedure. This is TBD (and will be course-specific).

A front-sheet is needed for each day's course materials. This is TBD.

10.2.5 Stock control

This covers stock control and stocktaking, and is TBD. (It must cover all Marketing materials, not just Training materials.)

This must cover lead time and minimum order quantity.

Stock control must cover not just documents, but:

- all course handouts
- standard APM printing
- blank consumables (paper, OHP slides)

Stock control also needed for documents acquired from other organizations.

- reprints and white papers

(These documents never look good when photocopied.)

Note that standard APM printing is required in bulk as part of the course material, for example:

- selected Technical Reports and Architecture Reports
- ANSA folders

The ANSAware manual we could copy in principle copy ourselves, but it's time consuming (A4 single-sided -> A5 double-sided and drilled)

For other material printed in-house, we just need to define a 'small stock' to avoid the overheads of printing one-at-a-time.

10.2.6 Spot checks

Note: Consider moving this to a checklist

There is plenty to go wrong when course materials are printing and copied. Follow this procedure for each presentation, on one copy:

1. Check that the orange separator is in place
2. On the first page, check that the document number and version matches that on the reference list
3. On the first page, check that the Status is Approved, and that the APM copyright notice is present
4. Flip through the presentation, and select a random pair of left and right pages. Check the print quality for
 - overprinting
 - faintness
 - smearing (especially at left and bottom edges)
 - blurring (second-generation copy)
 - blank pages
 - visible punch holes

And as an overall check:

- 1. Check that the Welcome session sequence matches the sequence in the binder**
- 2. Check that the customer logo appears on the title slide of the Welcome session**
- 3. Check that the spine insert is in place**

11 Course QA

This document contains various checklists to be used when reviewing course material; see the Appendixes. Other QA procedures and standards are TBD.

There is no separate Quality Plan. Any work towards BS5750/ISO9000/EN29000 is TBD.

Some care is needed with terminology here

- evaluation: what participants do to presenters
- assessment: what presenters do to participants
- self-?: what participants do to themselves
- self-?: what presenters do to themselves

Review is something else

12 Appendix - Course countdown

Note: This might be better done as an MS Project outline plan (template month-N), as was done for [BNR]?

This is a typical countdown for a standard course. It needs to happen for each course presentation.

The following activities need to be tabulated systematically by activity owner, lead time. etc.

- Chase prospects/1 - Sales
- Chase prospects/2 - Sales
- Review course against profitability threshold - Marketing
- Book location - Marketing
- Chase provisional bookings - Administration
- Send invoice - Administration
- Send joining instructions -Administration
- Confirm course with location - Administration
- Copy/Print course material - Administration

Note: Chase vendors for copies of white papers

Other countdown activities are TBD.

13 Appendix - Course facilities and equipment

13.1 Summary

TBD.

13.2 Locations

13.2.1 APM in-house (conference room)

The issues are:

- maximum numbers
- seating and technical facilities need to be repaired and improved

13.2.1.1 *Environment*

The general layout is fine, but the room cannot seat more than 16.

We have only 7 reasonable chairs (10 if we take chairs from people's offices).

There is no air-conditioning; because the room is in the centre of the building it is very uncomfortable in hot (and cold) weather. Daylight is no problem (there is none!)

Noise is a problem too.

Parking is becoming more restrictive.

The reception procedure for participants is TBD (to be included in joining instructions).

13.2.1.2 *Equipment and technical facilities*

The glass on the overhead projector is badly scratched and needs to be replaced.

There are no electronic projection facilities (for electronic presentations and demonstrations). We should consider hiring or purchasing either:

- LCD colour projection panel and overhead projector, or LCD projector
- TV convertor and TV (with stand)

It is possible to drive either of these from a PC. If the PC is a portable machine, it may not be able to drive both its LCD and the projection/PC. If so, a video splitter would also be needed; this is TBD.

Note: For local contacts see Audio Visual Services in Yellow Pages. ajw spoke with Metro Anglia just off Green End road, who were a Sony referral. [Metro Audio in Barnwell Business Park may or may not be related.]

(Most of our Macintoshes are believed to work. Unix workstations may be impractical, unfortunately; this would need to be verified with the vendor.) We

need to check the display refresh rate to see that this is comfortable for participants, who will be viewing it for many hours.

The Ethernet cable runs to the wrong end of the room (near the door).

The one telephone point in the room is not wired up at present.

There are sufficient power points for demonstrations, but not for a hands-on course.

We can muster sufficient workstations for a Unix-based hands-on course, but there are upgrade costs and configuration effort for these machines; see below.

The photocopying whiteboard may be useful for syndicate group work, but can only be used by one group at once.

13.2.1.3 *Catering*

The small conference room is inconvenient for more than 10 people or so, and seating during lunch is impractical. It may be preferable to take people to lunch at a local pub instead (although cost is then a problem).

While it may be acceptable for MC/TC meetings to spill into the coffee room, this is not possible for public training courses.

13.2.1.4 *Consumables*

APM will provide copies of course materials, pads, and pens.

13.2.2 **APM local (Cambridge)**

We need to research and build relationships with:

- Colleges (out of term)
- Trinity Centre (Science Park), and similar facilities
- hotels
- other possible sites

The procedure for vetting these locations is TBD. We should also consider how these locations might be used for other APM events.

Note: Do Unipalm Computer College have their own facilities? If so, would it be appropriate to use them? If not, would they recommend somewhere? What else could we learn from them?

13.2.3 **Off-site (UK)**

These locations would be used by third-party training organizations (for example, in a London hotel). We are not planning to organize any courses at these locations ourselves.

The contract with the third-party training organization should lay down who provides the facilities.

13.2.3.1 *Environment*

This is TBD

13.2.3.2 *Equipment and technical facilities*

This is TBD. It will need to be organized via the third-party training organization.

13.2.3.3 *Catering*

This would be provided by the location.

13.2.3.4 *Consumables*

APM will provide copies of course materials.

Course participants should bring their own stationery.

13.2.4 On-site (at customer site)

13.2.4.1 *Environment*

The customer will provide a room as specified by APM

13.2.4.2 *Equipment and technical facilities*

The customer will provide equipment and technical facilities as specified by APM.

Lugging a projection panel and PC around is no fun.

Need to beware of video standards (NTSC for the US?)

13.2.4.3 *Catering*

The customer will provide catering facilities.

13.2.4.4 *Consumables*

The customer will provide stationery for participants.

13.3 Equipment

13.3.1 Unix workstations

The following machines are available (this list is a little out-of-date)

Figure 13.1: Machines available

lassemaja	?	?	
tabasco	HP 9000/300	?	[1]
xterm131?	colour xterm	N/A	
?	HP 9000/300	?	

May be able to get 3 other xterms, plus the old HP9000/300s when they are freed off.

Need some decent mice and mouse mats too!

The actual machine requirements are:

- 1 machine per 2 participants
- 1 overall server (to host xterms, printer, tape drive, run NFS, DNS?, etc)
- 1 machine for presenter
- 1 spare (live)
- 1 hot standby (available at short notice)

That is

- for 15 participants, 13 machines (8+1+1+1+1+1, 12 plus 1 standby)
- for 12 participants, 11 machines (6+1+1+1+1+1)

[1] Requires moving the print server and reconfiguring lp scripts etc.

[2] Underpowered

13.3.2 Peripherals

We would also need:

- 1 Postscript printer
- 1 QIC tape drive (for ANSAware, and for system installation)
- 1 CD-ROM drive (for system installation)

13.3.3 Software

We would also need:

- 2 copies of ANSAware tapes (version TBD)
- system installation media (QIC tape or CD-ROM)

13.3.4 Configuration information

The following configuration is needed

- ANSAware installation directory structure

Phone lines

13.3.5 Documentation

ANSAware manuals (one for presenter, how many others?)

Ready-reference for common ANSAware problems

Operating system manuals

CD-ROM with manuals on as well

13.3.6 General props

(see standard book)

OHP

Spare bulb

Flipchart

Also non-technical stuff (OHP, flipchart etc.)

13.4 Equipment for hands-on courses (off-site)

What state do you expect things to be in when you arrive

- complete disarray: only parts of machines, some broken and/or not working, some unsuitable, too few of them

- standalone: machines working, but not correctly configured, software not installed or missing or wrong versions
- networked: machines networked but not an isolated configuration, users etc not configured, some redundant software installed

13.4.1 Machines

Type

Free disk space

Tape drive

Reliability issue

OS version (uname etc.). Need to specify a procedure here.

Compiler version

make

imake

rcs

13.4.2 Network configuration

NFS

NIS (yp) or nothing for users/groups etc.

13.4.3 Tools to build ANSAware

Ready reference for common problems

13.4.4 User configuration

Username

Password

Login shell/preferred shell

Editor

Also need root password for some things?

Groups and default permissions

13.4.5 Other tools

Mail connectivity (needs sendmail, and a mail UA).

Network utilities (maybe including source?)

Dialback information for APM

Internet feed

GNU stuff (which?)

13.4.6 Hardware toolkit to take

Ethernet terminators

Length of Ethernet

DOS toolkit

13.4.7 Also...

Need someone on standby at APM

Treat this as an exhibition setup; it's worse because you need

Need a test procedure for checking out the machine setup (basic, and also more sophisticated).

Need to know what works and what doesn't in ANSAware itself

14 Appendix - Course Marketing Questions and Answers

14.1 Summary

The first few are from a covering letter from another training organization. We need to be able to give model answers to these questions (and may work these into some of our marketing material).

Note: Include Kennedy Carter model answers here

14.1.1 About APM

14.1.1.1 *What is the history of APM?*

14.1.1.2 *How many years of experience do APM have in training?*

14.1.1.3 *How many technical professionals have APM trained?*

Note: What number would we like to be able to claim?

14.1.1.4 *Have APM trained others from our company; what were the results?*

14.1.1.5 *Is education APM's only business; are they trying to sell other products and services?*

14.1.1.6 *How many full-time staff do APM have?*

14.1.1.7 *Do APM teach a broad range of topics; can they satisfy future training needs as well?*

14.1.2 About APM's facilities and operations

14.1.2.1 *Are courses taught in APM's own education centres?*

14.1.2.2 *What specific equipment do APM use in hands-on courses?*

14.1.2.3 *What systems ensure that hardware, software, hand-out materials, and environment are perfect?*

14.1.3 About APM's instructors

14.1.3.1 *What is the typical profile and background of instructors?*

14.1.3.2 *What methods and criteria are used to select instructors?*

All instructors are employed by APM.

- 14.1.3.3 *What percentage of the instructors' time is spent actually working with the technology they teach?*
- 14.1.3.4 *How do instructors keep up-to-date in practical use of the technology?*
- 14.1.3.5 *What is the process for training instructors?*
- 14.1.3.6 *How is the performance of individual instructors measured? What standards are expected?*
- 14.1.3.7 *If instructors are evaluated by the course participants, what specific items are covered?*

14.1.4 About course development

- 14.1.4.1 *Is a formal course design process used? What does it involve?*
- 14.1.4.2 *Are courses developed by an individual, or a team? If a team, what is its structure?*
- 14.1.4.3 *How is it ensured that a wide perspective and not a single point of view is represented in the course content?*
- 14.1.4.4 *Are the courses vendor-independent?*
- 14.1.4.5 *How is it ensured that evaluations of competing hardware and software are unbiased?*
- 14.1.4.6 *How is information on global technology incorporated?*
- 14.1.4.7 *How often are courses revised and updated?*

14.1.5 About guarantees

- 14.1.5.1 *What specific guarantees are offered?*
- 14.1.5.2 *What would APM do if for any reason we are not satisfied that the course met our educational objectives?*

14.1.6 About the course

- 14.1.6.1 *Which product will be used for the hands-on courses?*
This is TBD. (Orbix and ANSAware are the front-runners).
- 14.1.6.2 *Can these courses be given on-site?*
Yes. [We always answer yes.]
- 14.1.6.3 *In the hands-on courses, do we get a machine each?*
Participants work in pairs.

14.1.6.4 *What mix of backgrounds do you expect on each course?*

14.1.6.5 *Why are the courses so expensive?*

14.1.6.6 *Why is this course the best?*

14.1.6.7 *Why is this course relevant to me? The content doesn't seem to relate to my business*

Note: Include Gray's comments here.

15 Appendix - Course description review checklist

15.1 General

Note: This is where the storyboard should go.

Note: [What standard materials should reviewers have studied first?]

Are all the topics listed in the marketing course outline covered?

Are all other promises kept (for example, those made in e-mail or other handouts)?

Is the material pitched at the correct level for the audience?

Are there any missing topics (as compared with competitive marketing material/curricula - list them)?

Are there any superfluous topics?

Are the topics presented in an appropriate order?

Is there too much or too little content for the time available (consider this for all the course variants)?

Do the topics overlap with other topics in the same series?

Is there an even spread of interesting topics across all the days?

Is the balance right between topics?

Is the material technically coherent and technically stable?

Do APM have the necessary technical background to present these topics?

Is appropriate use made of exercises, demonstrations, and so on?

16 Appendix - Module description review checklist

Note: Add the foci suggestions here

Note: Like any document, the cover page must tackle the business problem, the technical problem, and the solution; an example would be enough here.

16.1 Module title

Are the title and subtitle compelling?

Do the title and subtitle accurately reflect the module scope?

16.2 Module scope

Is the module coherent and self-contained? Does it focus on a specific topic?

Is the module too broad or narrow; should it be subdivided or combined?

Are there too many or too few items for the time allowed?

16.3 Module content

Do all the items belong in the module; which items should be dispersed into other modules?

Are there any missing items?

Are in-module exercises required or possible?

Is the module of sufficient general interest and relevance? Is it up-to-date?

Does the module contribute to the training needs? Are the participants better able to do their job than before?

Does the module add value (not just (self) plagiarism?)

Political focus:

Customer focus: would you pay £50 pounds to sit through this? (Roughly the per-module cost of attending.)

Note: In this session => at the end of this module.

Note: Add a "now try this" addendum to each course handout for a presentation

16.4 Module background

Is the topic technically stable?

Can APM gather (or already have access to) the facts and evidence to use to present this topic authoritatively? Is source material for the facts and evidence specifically identified?

If the module is based on an existing conference paper, chapter of a book, or other document, is this identified?

If the module is based on ANSA Phase III work, do we have the necessary approval to release it in this form?

17 Appendix - Exercise review checklist

Note: [it is TBD if we can also use this checklist for case studies generally]

Note: [Need to turn this checklist into a form for use by reviewer initial participants. Or a bulleted list for now?]

Note: Ty to get this onto one page

Note: This checklist should be a document template , for QA purposes

Note: Include Microsoft's self-study approach here

Note: Applicable to a paper review, or round-the-table review

17.1 Exercise identification

Name, version, etc.

17.2 Exercise purpose

What was the purpose of the exercise - what point was it trying to make?

17.3 Exercise effectiveness

How well did the exercise make the point?

Did you agree or disagree with the point?

Did you already appreciate the point before carrying the exercise? If so, was it self-evident? If so, did the exercise change your mind?

Do you think the point should be made explicitly (stated in the write-up), or implicitly (to be discovered by working the exercise)?

Do you think the point was important enough to warrant an exercise?

Was the exercise realistic and believable? Did it relate to your own past experience?

Was the exercise setting appealing to the audience? Was it too academic or not academic enough for the audience? Did it relate to their market?

Was the exercise too specific or too general?

Was the exercise interesting?

Was the solution predetermined? Did it explore alternatives? Was the exercise too open, too closed, or about right?

Was the exercise correct/accurate and realistic? Were proofs and pitfalls shown? Was it worked out in enough detail?

17.4 Exercise efficiency

How long did you spend on the exercise?

Was the exercise designed to take too long a time, too short, or about right? (In-module, full-module, multi-module)

Can you think of a better way of making the same point? Is an exercise the best way; why not just a simple question-and-answer?

Can you think of a better example that illustrates the point in the same way?

17.5 Exercise format

Should the exercise be carried out a different way (singly, in pairs, in groups, as self-study, and so on)? Is the format appropriate for the audience?

Were the exercise props (worksheets,...) suitable? Could they have been improved?

17.6 Exercise difficulty

Was the exercise too difficult, too easy, or about right for the target audience? Should hints have been given, and, if so, which?

Note that most competent software engineers cannot right 10 lines of correct code in a training course situation.

17.7 Exercise instructions

Were the exercise instructions clear, complete, and accurate, including the task, timescale, and format in which the results are to be presented?

Was the exercise setting/write-up clear? Was it too complete (should some information have been omitted for the participants to discover for themselves)? (Note that the exercise title can be a giveaway!)

Should answers be given? If answers were given, were they clear, complete, and accurate? Did the answers also summarize the exercise adequately?

Should reference material have been provided? If so, what? (For example, sample source code in the actual product.)

Is there the possibility of extending the exercise?

17.8 Exercise integration

Did the exercise blend with previous and following course material?

Should the exercise be followed up or elaborated on later in the course?

18 Presentation evaluation checklist

To be supplied.

Note: This should include an overall in-house evaluation checklist

Note: Consider applying the Stop/Start/Continue criterion in [Workshops]

Note: Consider applying the opening/closing types in [Presentations Plus]

19 Appendix - Course presentation checklist and general advice

This is not specific to the course

Note: Move to APM.1316

Note: Just consider: "what disasters could happen"?

19.1 About the organization

Organization chart

- Name
- Job title
- Authority
- Relationships

Map to get to the site

19.2 About the course

The course will be presented in English.

Contact details for their person coordinating the course (contact point)

- Name
- Job Title
- Address
- Phone
- Nearest fax
- E-mail

Same details for their standin, and for their system administrator

Participant list

Course timetable (working hours).

19.3 Room preparation (for in-house courses)

Do this the previous day; this is TBD.

19.4 Loading list

- Kit (including OHP)

- TBD

19.5 At the end

Bring back the flipcharts

Writing up the reports (need a checklist for this too).

20 Appendix - Project Costs and Timescales

Refer to the attached sheets for cost information. This is held in separate documents.

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