



# **CEAEC FALL MEETING IMESA<sup>FR</sup>® SPONSORSHIP UPDATE**

Ottawa – 11/21

Prepared by: Brandon Fryman, John Tatom, and Bill Evans

Presented by: Bill Evans

# OUTLINE

- Sponsorship Group Update
  - ▶ Sponsors
  - ▶ Licenses
- Sponsorship Agreements Update
- Budget Updates/Projections
- Strategic Plan
  - ▶ IMESA FR v2.2
  - ▶ APT Support Plan
    - Tier-Specific Support Plan
    - Level of Effort Support Plan
  - ▶ IMESA FR Development Team Software Features List Review
  - ▶ Features Chosen for Incorporation into IMESA FR v2.2.1
  - ▶ Schedule for IMESA FR v2.2.1

# SPONSORSHIP GROUP UPDATE

- Sponsors
  - ▶ Orica (Gold)
  - ▶ Dyno (Gold)
  - ▶ Austin (Silver)
  - ▶ Nelson Brothers (Silver)
  - ▶ Discussions on-going with other potential sponsors
- Licenses
  - ▶ Expected annual cost USD 2000
    - Expected annual licenses: 30
      - ▶ Over 50% will be regulators
      - ▶ Expect to lose most 'independent' trainees
- Total Annual Budget +/- USD 200-220,000
  - ▶ This excludes training where courses, usually, pay for themselves

# SPONSORSHIP AGREEMENTS UPDATE



- APT has drafted sponsorship agreements and they are currently under review in the Sponsors' legal departments.
- APT and the Sponsors will finalize these agreements once the Sponsor reviews are completed.
- Sponsor agreements will be on an annual basis and will discuss tier-specific support for Sponsors in addition to level of effort support for the project (both to be discussed in later slides).

# BUDGET UPDATES/PROJECTIONS

Level	Amount
Gold (x2)	$\$50,000 \times 2 = \$100,000$
Silver (x2)	$\$30,000 \times 2 = \$60,000$
<b>Total Current Sponsors</b>	<b>\$160,000</b>
Estimated Number of Single Licenses (x30)*	$\$2,000 \times 30 = \$60,000$
<b>Total Projection</b>	<b>\$220,000</b>

- Note that funding from individual user licenses will not be available until after an IMESA FR v2.2 release.
- Sponsor values shown are subject to change; using current values/estimates to create an example.

# STRATEGIC PLAN

## APT SUPPORT PLAN – TIER-SPECIFIC SUPPORT PLAN

All sponsors will be entitled to:

- ▶ Standard tech support (e.g., code unlocking, software installation questions, basic technical questions) for users entitled to sponsorship IMESA FR licenses.
- ▶ Free corporate access to “awareness sessions”. These “awareness sessions” will be held periodically, subject to attendee interest.
- ▶ Free incremental software updates for users entitled to sponsorship IMESA FR licenses.
- ▶ Advanced support to regulators (including assisting regulators on variance/derogation submissions from partner companies). Sponsor fees also support regulators who are unable to pay for training.
- ▶ 50% off the training cost for users entitled to sponsorship IMESA FR licenses.
- ▶ Sponsors will be identified by sponsorship tier in all software material, training material, IMESA FR website, etc.

Sponsor Tiers	Cost	Number of Licenses	Sponsorship Benefits for all Tiers	50% Off Training For Sponsorship Licenses	Advanced Tech Support <sup>+</sup>	Free Web-Based Upgrade Training	50% Off Licenses Above Sponsor Licenses	Votes on Priorities in IMESAFR Development Team
Platinum	US\$75K/year	20	Entitles the sponsor to a number of licenses for trained users based on the chosen tier.	✓ Plus 50% off for any other employees	✓ (40 hrs)	✓	✓	4
Gold	US\$50K/year	12	Standard tech support.  Free corporate access to “awareness sessions” and free incremental software updates.	✓ Plus 50% off for any other employees	✓ (20 hrs)	✓		3
Silver	US\$30K/year	5	Advanced support to regulators (including assisting regulators on variance/derogation submissions from partner companies). Sponsor fees also support regulators who are unable to pay for training.	✓				2
Bronze	US\$10K/year	1	Sponsors will be identified by sponsorship tier in all software material, training material, IMESAFR website, etc.	✓				1

<sup>+</sup> Advanced tech support includes answering questions and providing support not generally covered under standard software tech support. It does not include APT conducting analyses for sponsors, though APT offers these services through independent IMESAFR consulting contracts/agreements.

# STRATEGIC PLAN

## APT SUPPORT PLAN – TIER-SPECIFIC SUPPORT PLAN

- IMESA FR Project Team votes are allocated in accordance with the table below,

Sponsor Tiers	Votes on Priorities in IMESA FR Project Team
Platinum	4
Gold	3
Silver	2
Bronze	1

- Votes on where to offer a North American class (3=Class), in accordance with the table below,

Sponsor Tiers	Votes
Platinum	3
Gold	2
Silver	1
Bronze	0

- Votes on where to offer an international class (4=Class), in accordance with the table below,

Sponsor Tiers	Votes
Platinum	2
Gold	1
Silver	0
Bronze	0

# STRATEGIC PLAN

## APT SUPPORT PLAN – LEVEL OF EFFORT SUPPORT PLAN

- APT has discussed a list of sponsor benefits/ideas that are dependent on the actual level of total sponsorship.
- APT shall prepare and provide the Sponsor Group the following: An annual status report outlining the progress to date, project budget, and update on the level of effort funding support.
- Allocation of project budget above necessary expenditures will be at the discretion of the IMESA FR Project Team and will be decided by a simple majority vote. Voting shares for sponsors will depend on the sponsor level of the sponsoring organization.
- Ideas for potential level of support tasks are presented below:
  - ▶ Software Development
  - ▶ Consensus Building
  - ▶ Sponsor Subsidized Classes
  - ▶ Online Training Generation

# STRATEGIC PLAN

## APT SUPPORT PLAN – TIER-SPECIFIC SUPPORT PLAN

Gold and Platinum sponsors will also be entitled to:

- 50% off the training cost for all members of the organization, not limited to just users entitled to sponsorship IMESA FR licenses.
- A certain amount of advanced IMESA FR technical support. This includes answering questions, offering advice, reviewing cases, or other efforts beyond the standard level of technical support offered to IMESA FR users. Note that this may not be applied to APT running/generating scenarios for the sponsor.
- Free web-based upgrade training.

Platinum sponsors will also be entitled to a 50% discount for licenses above their allocated amount.

# STRATEGIC PLAN

## IMESA FR V2.2

- Current sponsor level support is enough such that APT can provide ongoing support to the IMESA FR v2.1 software. However, this support will include only technical support, software maintenance, and some meeting and consensus building support. It would include no (or very minimal) software development/improvements.
- In order to generate a sizeable software development/improvement budget, either more sponsors or access to individual software license funding would be needed.
- Access to individual software license funding would not be available without the release of IMESA FR v2.2.
- The Sponsors have agreed that APT go forward with the development of v2.2
  - ▶ What should be included in v2.2. is still under discussion

# STRATEGIC PLAN

## IMESA FR DEVELOPMENT TEAM SOFTWARE FEATURES LIST REVIEW

Task	Description	Assumptions	Cost Estimates
Ability to Toggle Buildings On/Off in a scenario	Add layering to visually turn PESs or ESs on/off.		\$7K
Barricade Improvements - Using Current Inputs	IMESA FR logic will be created to handle side impact blocking and vertical energy protections without relying on user-defined values.		\$23K
P(e) Updates, IME	P(e) Updates Based on IME Study		\$61K
P(e) Updates, TP14 Rev 5	TP-14 Rev 5 Methodology for P(e)		\$35K
NATO Country QD Tables	Implement one country's QD system, based on a simplified NATO-QD standard.	Actual NATO QD would cost more; subsequent national standard implementations would be about 90% of cost	\$40K
Debris PDF Updates (high end)	Update PDF models based on comparisons between the current model, other available models, and test data. Compare 4 models and five tests.	Not going to TP-14 Rev 5, but considering it in comparisons	\$78K
Debris PDF Updates (low end)	Update PDF models based on comparisons between the current model, other available models, and test data. Compare two models and two tests.	Not going to TP-14 Rev 5, but considering it in comparisons	\$47K
Glass % by Wall Option	Adjust the % glass for each wall, allowing calcs to have better estimates of PES debris infiltration into ES and to consider glass breakage on just the walls that receive sufficient P/i.	One window type/size per wall. This task is independent of glass injury hazards.	\$48K
ES Pressure and Impulse Adjustment Updates	Incorporation of TP-14 Rev 5 step 7		\$9K
Propagation	Implement P(propagation) logic being worked on through ATF with ISP. This first version will be simple and	ATF stays engaged and finishes planned studies	\$79K

# STRATEGIC PLAN

## SCHEDULE FOR IMESA FR V2.2.1

- Given that contracts agreements are in place, work could begin on the software in November. (Note: agreements are still under review by sponsors)
- Depending on the chosen software developments/improvements, IMESA FR v2.2.1 could be ready for group testing by the end of 2021.
- APT would provide the software to the group prior to public release for review post beta testing (APT will be performing the beta testing and not depending on the group for testing).
- Given this schedule, IMESA FR v2.2.1 could be ready for public release by the end of January 2022.
- This could allow for the first IMESA FR v2.2 training course to be offered at ISEE 2022
- Other features as identified by the IMESA FR Development Team will be added as allowed by the Software Development budget with priority determined by the IMESA FR Project Team