

**ASICC COMMENTS ON
THE DRAFT LAUNCH LICENSING PROCEDURE
RELEASED ON 10 JUNE 1999**

This paper constitutes the comments of the Australian Space Industry Chamber of Commerce (ASICC) to the Draft Launch Licensing Procedure dated 10 June 1999 provided by the Services Industries Coordination Branch of the Department of Industry, Science and Resources (DISR). These comments reflect the general view of submissions made to ASICC by the ASICC membership and other interested parties in the limited time that has been available to respond to these Draft Procedures.

1. GENERAL COMMENTS

ASICC has maintained that any regulatory framework for Australian Launch Activities must:

- 1) Establish a constructive and supportive environment to attract and foster investment in Australian Space Activities,
- 2) Ensure that any obligations imposed on business entities attempting space activities from Australia be clear, unambiguous, workable and free from arbitrary determinations,
- 3) As a minimum be no more stringent to business than those currently imposed by other space-faring nations worldwide.

In this respect ASICC notes the Government's stated intent to "minimise and where possible prevent duplication of effort, decrease turnaround time for launch operations approvals while protecting... obligations of the Commonwealth". ASICC fully supports this intent and will work closely with government to provide the business perspective to ensure that this intent is properly translated into the Regulations.

2. TIMELINESS OF RESPONSE

ASICC feels that the aspect of duplication of effort and timeliness of response cannot be stressed strongly enough for this industry. ASICC recognises that the Commonwealth has specific obligations, on behalf of the public, to ensure that the holders of Space Licenses and Launch Permits conduct their operations in a safe and responsible manner and that the Commonwealth must be able to obtain the necessary information to form a balanced view. ASICC believes that this process, if handled effectively and efficiently, will strengthen the industry. But the process must be efficient and timely otherwise it becomes a burden that will severely constrain the industry.

The Government, in setting its regulations and procedures, must recognise that all groups seeking Space Licenses and Launch Permits in this country will be doing so on a purely commercial basis. They will be competing against well entrenched global competitors for launch vehicles, for satellite customers and for funding as they try to carve out a piece of these global space revenues for Australia. In this environment significant delays in assessing proposals can lead to a loss of funding or loss of rights to specific vehicles. Significant delays in assessing launch permits can lead to loss of

satellite customers as they shift to countries where the approvals are not as involved or are more prompt.

ASICC urges the government to commit itself by way of these Regulations to be the most efficient space-licensing regime in the world. Such a commitment will significantly further Australian Space Industry's prospects of capturing a share of this growing business. This commitment will require a constant focus on balancing the need for extended consultations versus the business implications of the delays at each stage of the process.

In this respect ASICC recommends that the government commit itself in the Regulations to specific turnaround times for various approval stages. This would include acknowledgment of receipt of the document, a specific timeframe for requests for additional information that may be required, a timeframe for holding meetings or briefings with the company involved if this is necessary and a timeframe for a decision on the application.

ASICC is particularly concerned about the Launch Permit approval timeframe, especially since several current proposals for Australian Launch Activities plan to use quick turnaround time between launches (in the order of days) as a key differentiation factor to win business. It is ASICC's view that if the operator holds a Space License and the launch proposed is within the parameters of that license, then the Launch Permit should be mainly a notification of Launch. This requires a mere compliance check and approval turnaround time should be contained to no more than one day. ASICC encourages the government to adopt this type of thinking for all its approval processes, actively looking for the fastest way to expedite this approval process.

ASICC recognises that there are many different aspects involved in the process of assessing and approving the various licenses proscribed in the Regulations and that each process may necessarily involve different timeframes. ASICC would be happy to work with government to establish reasonable business timeframes for each of these aspects to ensure that world class efficiency can be appropriately enshrined in the Regulations.

3. CLEAR GUIDELINES OF WHAT IS REQUIRED

The Space Activities Act uses similar language to describe requirements for both a Space License and a Launch Permit. This version of Launch Licensing Procedures seems to follow the legislation on this point which gives the impression that many of the activities covered in the Space License must be repeated for the Launch Permit.

An example is that on Page 4 of this version of these Launch Licensing Procedures it states that for a Launch Permit the Minister must be satisfied that the people conducting the launches are capable of doing so. The method of compliance cited is the Operations Approval, which is also necessary for the Space Licence. ASICC feels that this is confusing for an applicant and may lead to a duplication of effort.

ASICC makes two recommendations:

- 1) That these procedures be reviewed to remove the implied duplication of effort. The Legislation is a bit messy in this regard. The Regulations should be able to make the process clear and unambiguous by indicating which activities are required at which stage of the process.
- 2) That all Launch Permit requirements already contained in a Space Licence be removed and that the Launch Permit be reduced to the bare minimum to achieve quick turnaround time

Ideally the Regulations should specify the required activities only once and in such a way to make it clear to any applicant what they must do to achieve the appropriate licences.

4. PROVISIONAL LICENCE

It is clear that the path to achieving a Space Licence requires the successful completion of many diverse activities. Many of these activities (Emergency Preparedness Exercises or Systems Interface Verification Reports as part of the Operations Approval for example) can only be fully assessed once the facility is completed and ready for operation. This means that in practice a Space Licence cannot be issued until the entire facility is complete.

These procedures will apply to commercial launch projects where the applicants must compete internationally for investment financing to fund their projects. This funding is usually contingent upon the achievement of tangible milestones in the course of a project, however these procedures as currently designed only grant a Space Licence at the end of completion of the facility.

ASICC submits that there should be a Provisional Space Licence issued at an early stage in the process. This licence would indicate that the applicant has completed certain preliminary requirements and is progressing towards a full Space Licence. This type of approach is already envisaged in the procedures with the ability to issue a Provisional Vehicle Type Approval as described on page 32 of the procedures document. The Provisional Space Licence would list the remaining conditions that must be met by the applicant and these conditions would be revised as the applicant completes them. The Space Licence would then be issued at the completion of all the conditions (or sufficient conditions to allow testing to commence). This type of approach would greatly assist all applicants as they seek funding and technical partners for their project.

5. FULL COST RECOVERY FOR ACCIDENT INVESTIGATION

ASICC has serious concerns about the intent to require the Space Licence holder to pay for incident and accident investigations. ASICC knows of no other space-faring nation that imposes this requirement on its operators. As such, this will place Australia at a significant disadvantage with respect to its international competitors in the launch industry.

ASICC can also find no evidence that such a requirement is imposed on other industries in Australia. The costs of Aviation and Marine incident and accident investigations are born by government agencies as part of their obligations to ensure public safety in Australia. Accident investigation is generally considered a public responsibility of the government and should be funded from the Budget rather than cost recovered.

ASICC is very concerned about the general Government line of full cost recovery for this and all other aspects of space activities. It indicates that despite the Government's comments about how welcome this industry is and of the potential benefits it will bring to the country, the Government is not even prepared to fund the normal duties of government for this industry that it commonly provides to the other industries within Australia. Entrepreneurs who are prepared to take commercial risks to introduce this industry to Australia without asking the government for funds are now being asked by Government to fund what are normally considered Government activities as well.

This approach is not conducive to the creation of a long term space industry in this country. An emerging industry cannot sustain this. The advantages of Australia as a launch site are not sufficiently unique to overcome the impression that the Australian Government will only support the industry if industry assumes the Government's costs in regulating the industry. Those with other options will simply pass Australia by as was the case with the Zenit vehicle proposed for Cape York which is now operational with Sea Launch.

ASICC urges the Government to change its policy on full cost recovery to give this industry a chance to be born.

6. INSURANCE COVERAGE

The range of insurance coverage (such as incidental medical malpractice liability) seems to exceed the scope of launch related activities. It is not clear to ASICC whether the insurance coverages cited are a list of requirements of State and Federal laws for industrial activities generally. ASICC would like more information on the reasons that these coverages are listed before making a final comment.

In general ASICC feels that the insurance required in this section should be limited to what the Commonwealth requires to meet its obligations internationally and domestically. All other decisions about insurance should be the sole responsibility of the launch service provider in the course of their normal business management decision process.

7. OWNERSHIP OF LAND

The Launch Site Approval section seems to require the applicant to obtain a lease from State or Territory Governments or other lease holders that permits the conduct of space-related activities on the site. Does this preclude direct ownership of the launch

area? ASICC submits that the applicant should not be restricted from direct ownership of the launch area if they chose to acquire the land.

This Launch Site Approval section also mentions the necessary approvals and permits for State and Territory governments. While not specifically an issue for the Regulations it would be very useful if SLASO compiled a list of these requirements for the applicant to facilitate the process of dealing with the States and ensure compliance.

8. OVERSEAS STANDARDS OF MANUFACTURE

The Launch Vehicle Type Approval states that the manufacturing contractors must have a quality assurance certification recognised by the Commonwealth. ASICC is concerned that this requirement may be too limiting as many of the manufacturers for currently proposed vehicles may not have quality assurance standards that are known by the Commonwealth. ASICC submits that the Regulations make provisions to allow manufacturers who do not have Commonwealth recognised quality assurance standards to be assessed in other ways rather than be excluded from consideration.

9. HAZARD ANALYSIS

ASICC supports the Government's use of an instantaneous value of Casualty Expectation for Australian Launches. ASICC agrees that the instantaneous value is a more mathematically rigorous and realistic means of assessing probability of failure and consequent Casualty Expectations than the FAA approach used in the US.

The setting of Australian standards for Hazard Analysis is supported by ASICC. The overall topic of Casualty Expectations and Hazard Analysis is very involved, however and the absolute level of these standards is a potential area of concern for some of our members. ASICC awaits further detail in the Regulations on this important topic.

10. ORBITAL DEBRIS

ASICC finds no mention of the orbital debris issue in this version of the Regulations. Orbital debris is becoming a significant problem in mission planning and on-orbit operations. The strong international trend is to require those responsible for launches and satellite operations to plan to minimise the generation of debris. ASICC feels that the Australian Regulations should match the international trend to maintain a clean space environment to ensure ongoing access to space.

11. RE-ENTRY PERMIT

ASICC has previously raised its concerns about the legislative requirement that the launch provider be responsible for the re-entry of any payload they have boosted. ASICC has pointed out in previous submissions that some payloads are designed to spend some time in space and will not be under the control of the launch provider. In

many cases the launch provider will not even be aware that they have been de-orbited. ASICC believes that the liability related to re-entry should accrue to the organisation responsible for the re-entry. In many cases this will not be the launch provider.

ASICC submits that the Regulations establish a means of placing the re-entry liability indemnity requirements onto the party responsible for the re-entry. This may be done with a Re-entry permit, which is required prior to launch for launches from Australia. It could also serve as a mechanism to indemnify the Commonwealth for future commercial operations where the non-Australian operator (ESA or NASA) has obtained a launch outside Australia and intended to re-enter outside Australia but for operational reasons now chooses to re-enter in Australia.

For example, take the case of Kistler launching a payload for NASA, which is intended to return to Australia. In this case there should be three re-entry permits. Two permits would be issued to Kistler, one for the Launch Assist Platform and one for the Orbital Vehicle. The third re-entry permit would be issued to NASA for its payload.

There may be other ways besides the re-entry permit to achieve this result. ASICC submits that the objective should be to place the liability onto the party responsible for the re-entry and encourages the Government to address this issue in the Regulations.

12. CONCLUDING REMARKS

ASICC recognises that this version of the Launch Licensing Procedure is more of an overview document, hence many of our comments have been more general in nature. ASICC looks forward to providing more in depth comments when the detailed drafts of the Launch Licensing Procedures and the overall Regulations are completed.