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SEAL The United Nations Secure Infrastructure for Electronic Commerce and Trusted Transactions

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Executive Summary

The SEAL Infrastructure is now connecting pilot SEAL hubs as Certification Authorities CA in a selected group of countries. SEALs are at the hub of GTPNet operation and are country-specific. They provide a number of services that enable electronic trading including gateway and switching services into GTPNet, certification, and encryption functions as well as being part of the country specific infrastructure, information and policy. By establishing a trusted hierarchy of government and regional business advisory bodies, SEALs will eliminate concerns about security for business online. Trade Points will be used as a first level Intermediate Certificate Authority (ICA) under the SEAL which will interconnect existing trusted environments such as PTT, Chambers of Commerce, Banks, etc. Trade Points are now present in 125 countries and expanding each day. Trade Points acting as ICAs will interconnect securely to SEALs which work in close co-operation with, or act as, the CA in the case where the country is without an official CA umbrella.

End users will be able to transact via the SEAL Infrastructure worldwide with a cross-certified smart card. The SEAL SmartCard will both hold currency and authenticate the businesses using GTPNet. Companies are then assured that potential trading partners are legitimate organizations, authenticated and certified through a chain of trust consisting of government and non-government bodies within the Trade Point infrastructure world-wide. The certification process totally respects existing geo-political certification environments and reinforces existing certification authorities by interconnecting them securely to a trusted global infrastructure.

As part of this pilot SEAL Infrastructure project, the US, China and Australia SEALs will work toward common policies and practices as well as develop an interoperability framework. When in place, the cross-certified SEAL environment will provide a secure and protected electronic SEAL gateway between the three nations, thus ensuring privacy and authentication and expediting transactions among Trade Points, businesses, individuals and governments. To position the UN as a global electronic commerce hub, the UNTPDC aims to link the SEAL infrastructure to existing CA and will help to coordinate electronic commerce policies and cross-certification efforts in countries interconnected by the SEAL Infrastructure, which will eventually lead to the international recognition of digital signatures for cross-border transactions.