

AMENDMENT #3 FOR ITB NUMBER ACQ04001

DATE AMENDMENT ISSUED: March 24, 2004

The state of Ohio, through the Department of Administrative Services, Information Technology Governance Division, for the Department of Public Safety, is issuing this amendment for the Invitation to Bid entitled:

BMV Drivers License and Identification Card Printer ITB

DATE ITB ISSUED:	February 9, 2004
OPENING DATE:	**March 4 30, 2004**
OPENING TIME:	11:00 A.M.
OPENING LOCATION:	Department of Administrative Services IT Governance Division Bid Room 30 East Broad Street, 40 th Floor Columbus, Ohio 43215

The attached pages represent the Invitation to Bids (ITB) amendment for the ITB listed above. Please use replacement pages contained in this document to replace the page(s) previously issued by the State.

Specifications and requirements that have been revised are surrounded by double asterisks, bold type and when applicable, strikethrough.

- b. Infrared fluorescent - Forms a visible image when illuminated with light in the infrared / red visible part of the spectrum.
- c. Infrared dropout - Forms a visible image when illuminated with light in the visible part of the spectrum, but cannot be detected in the infrared region.
- d. Metallic, pearlescent, and iridescent - Inks that fluctuate in brilliance depending on the angle of illumination of the viewing. Difficult to mimic the luster and hard to copy or scan.
- ~~e. Metameric - The use of a pair of ink colors that differ in spectral composition but match one another under certain lighting conditions. Under incandescent light that may appear the same, but under colored light they appear as different colors.~~
- f. Optically variable (color shifting) - This overt security ink can be printed as a semi-transparent or opaque color shifting security feature. Advanced multi-layer light interference structures create noticeable, reflecting color shifts, i.e., gold to green, green to blue, etc.
- ~~g. Phosphorescent - Contains a pigment that glows when exposed to a light source of appropriate wavelength. The reactive glow decays after the light source is removed.~~
- h. Tagged - Contains taggants or compounds that are not naturally occurring and that can be detected using special equipment that reacts to electromagnetic energy identifying the grouping or type.
- ~~i. Thermochromatic - Ink that exhibits a sharp, reversible color change when exposed to heat, i.e., finger rubbing or hot air.~~
- j. Ultraviolet fluorescence - Invisible inks that emit visible color under exposure to ultraviolet light. Colors can be formulated that are not commercially available, making resistance to counterfeiting higher.

Substrate Inclusion

- a. Core inclusion - The manufacture of card stock with different layers. A colored core material may be placed inside to create a colored edge along the card.
- b. Embedded thread, fiber or planchette - Small, often fluorescent particles or platelets incorporated into a card material at the time of manufacture that can be seen later under certain lighting conditions. The embedded elements may have magnetic or other machine-readable properties that may be used to enhance the levels of security provided.
- c. Opacity mark - Similar to a watermark, it is a plastic that contains a unique translucent mark.
- d. Security bonding - The card periphery incorporates a security bonding material that bonds all of the layers together. Tamper evidence is seen if access is attempted to obtain the internal structures of the card.
- e. Ultraviolet features - Card bodies are made UV dull or possess a controlled response to UV light so they exhibit fluorescence that can be distinguished in color from the "blue" used in commonly available fluorescent materials.

***Optically Variable Devices**

- a. De-Metalized OVD - A combination of metal and transparency on the same foil or laminate. High-resolution OVD has selective de-metallization, either transparent or opaque, as defined above.
- b. Non-transparent OVD - Printed opaque, OVD's advanced multilayer light interference structures create noticeable, reflecting color shifts, i.e., gold to green, green to blue, etc. similar to what is seen on many global identification documents including driver licenses, banknotes, passports, and visas. The color shifting and authentication effect cannot be replicated or digitally recreated. Tightly controlled and only available for the most secure document applications.
- ~~c. Personalized OVD - OVD that is personalized for each card based upon biographical data, portrait, or signature of the cardholder.~~
- d. Transparent OVD - Printed on transparent lamination overlay material, advanced multilayer light interference structures create noticeable, reflecting color shifts, i.e., gold to green, green to blue, etc. When incorporated into a driver license design, feature will not interfere with photo or data information. Transparent OVD color shifting and authentication effect cannot be replicated or digitally recreated. Tightly controlled and only available for the most secure document applications, i.e., driver licenses, passports, visas, etc. The OVDs are digitally mastered and created using computer-guided lasers or electron beams.

Additional Features

- a. Biometric feature (template) - A biometric template of the customer's physical characteristics.
- b. Covert variable pixel manipulation - Covert dot matrix images that are converted to visible text with a special reader or lens.

		96. Security bonding - The card periphery incorporates a security bonding material that bonds all of the layers together. Tamper evidence is seen if access is attempted to obtain the internal structures of the card.	<u>Doc/section/pg#</u>
		97. Ultraviolet features - Card bodies are made UV dull or possess a controlled response to UV light so they exhibit fluorescence that can be distinguished in color from the "blue" used in commonly available fluorescent materials.	<u>Doc/section/pg#</u>
		Optically Variable Devices	
		98. De-Metalized OVD - A combination of metal and transparency on the same foil or laminate. High resolution OVD has selective de-metallization, either transparent or opaque, as defined above.	<u>Doc/section/pg#</u>
		99. Non-transparent OVD - Printed opaque, OVD's advanced multilayer light interference structures create noticeable, reflecting color shifts, i.e., gold to green, green to blue, etc. similar to what is seen on many global identification documents including driver licenses, banknotes, passports, and visas. The color shifting and authentication effect cannot be replicated or digitally recreated. Tightly controlled and only available for the most secure document applications.	<u>Doc/section/pg#</u>
		100. Personalized OVD - OVD that is personalized for each card based upon biographical data, portrait, or signature of the cardholder.	<u>Doc/section/pg#</u>
YES	NO		Reference
		101. Transparent OVD - Printed on transparent lamination overlay material, advanced multilayer light interference structures create noticeable, reflecting color shifts, i.e., gold to green, green to blue, etc. When incorporated into a driver license design, feature will not interfere with photo or data information. Transparent OVD color shifting and authentication effect cannot be replicated or digitally recreated. Tightly controlled and only available for the most secure document applications, i.e., driver licenses, passports, visas, etc. The OVDs are digitally mastered and created using computer-guided lasers or electron beams.	<u>Doc/section/pg#</u>
		Additional Features	
		102. Biometric feature (template) - A biometric template of the customer's physical characteristics.	<u>Doc/section/pg#</u>
		103. Covert variable pixel manipulation - Covert dot matrix images that are converted to visible text with a special reader or lens.	<u>Doc/section/pg#</u>
		104. Digital Seal - A method of securing and validating data by electronic means using digital signature technology. The issuing authority "signs" the information contained in the (Machine Readable Technology) MRT.	<u>Doc/section/pg#</u>
		105. Embedded Image (e.g., digital watermark) - An image or information that is embedded or encoded within a primary visual image.	<u>Doc/section/pg#</u>
		106. Laminates (security) - Transparent layers or films with an integrated security feature(s) are applied to the card with an adhesive or fused by heat. Available in a number of forms, security laminates are designed to be tamper evident and carry other security features to the card.	<u>Doc/section/pg#</u>
		107. Laser encoded optical image - Image and text files are placed to an optical WORM media as a visible diffraction pattern image that is eye-readable under a variety of lighting conditions.	<u>Doc/section/pg#</u>
		108. Laser engraving - The information cannot be mechanically or	