



US Army Corps of Engineers

 **BUILDER™ Application for a Patent License**

Instructions to Applicant: Please provide information to address the numbered criteria listed below. The information may be presented on separate attachments.

Send application to:

U.S. Army Engineer Research and Development Center
Construction Engineering Research Laboratory
ATTN: CEERD-ZBT-O (Dr. Phoebe E. Lenear)
2902 Newmark Drive
Champaign, IL 61822-1076
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BUILDER™ service areas *(check all that apply)*

For the field of use of Facilities Asset Management, there are 5 service areas for which you as an applicant may submit documentation in support of your license application. These are listed and defined below. The first service area, *Sales, Distribution, Use and Technical Support*, is **required** of all applicants. The other four are optional and available to include with the patent license for *Sales, Distribution, Use and Technical Support*. Sublicensing will not be allowed.

- Sales, Distribution, Use and Technical Support**: Product sales and support: provides software to end-users with services for installation and performance optimization, and software support/help desk. **(Required)**
- Assessment Services**: Services include implementation, field inspections, assessment activities, and data management.
- Training**: Involves developing and offering training materials and courses to educate service providers, engineering and computer science students, and end-users in all of the business lines. Also involves maintaining accreditation and course certifications, plus providing training-related follow up help services.
- Application Hosting**: Provides hosting environment, either Platform as a Service (PaaS) via bring your own license, or Software as a Service (SaaS) via provider-

acquired license, to deliver Sustainment Management System (SMS) to users via service arrangement.

- **Integration and Custom Development**: Involves creating an interface with existing systems and data, and custom development to create a customization built on top of BUILDER™ SMS technology.

The following questions are general requirements for all patent license applications. They are based on U.S. Code of Federal Regulations, Title 37 Chapter IV, Part 404 (37 CFR § 404). Please ensure that your responses address each requirement.

1. Identification of the invention for which the license is desired including the patent application serial number or patent number, title, and date.
 - **Patent No. 7,058,544 – “Knowledge-Based Condition Survey Inspection (KBCSI) Framework and Procedure” issued Jun 6, 2006**
 - **Patent No. 7,769,568 – “Condition Lifecycle Mathematical Model and Process” issued Aug 3, 2010**
 - **Patent No. 7,734,488 – “Functionality Index (FI) for Use with an Engineering Management System (EMS)” issued Jun 8, 2010**
 - **Related copyrights and trademarks**
2. Identification of the type (non-exclusive, partially-exclusive or exclusive) of license for which the application is submitted. If requesting a partially or fully exclusive license, a justification must be furnished below (item no. 10).

Non-Exclusive License

3. Name and address of the company, or organization applying for the license and the citizenship or place of incorporation of the applicant.
4. Name, address, and telephone number of the representative of the applicant to whom correspondence should be sent.

5. Nature and type of applicant's business, identifying products or services which the applicant has successfully commercialized, and approximate number of applicant's employees.

6. Source of information concerning the availability of a license on the invention.

7. A statement indicating whether the applicant is a small business firm as defined in 7 CFR § 404.3(c).

8. A detailed description of applicant's plan for development or marketing of the invention, or both, which should include:
Note: These may be answered in abbreviated format; however, full details shall be included in an attached Commercialization Plan. A suggested format and prompts for the Plan follow this application.
 - a) A statement of the time, nature and amount of anticipated investment of capital and other resources which applicant believes will be required to bring the invention to practical application;

 - b) A statement as to applicant's capability and intention to fulfill the plan, including information regarding manufacturing, marketing, financial, and technical resources;

 - c) A statement of the fields of use for which applicant intends to practice the invention, and how the applicant plans to use this technology. Provide a description of (1) primary field(s)

of use; and (2) the products and/or processes you would expect to commercialize based on the licensed intellectual property;

(1) The primary field of use is Facilities Asset Management.

- d) A statement of the geographic areas in which applicant intends to manufacture any products embodying the invention and geographic areas where applicant intends to use or sell the invention, or both;

- e) Are there any principal barriers to entering the market place? Are there any competitive products in this area? What proprietary advantage/s can you add to licensed intellectual property that would improve your market share?

- f) Statement of proposed royalties and other licensing income to be furnished to the Government.

See the royalty table for the *Sales, Distribution, Use and Technical Support* service area. (Appendix B).

- 9. Identification of licenses previously granted to applicant under federally owned inventions.

- 10. A statement containing applicant's best knowledge of the extent to which the invention is being practiced by private industry or Government, or both, or is otherwise available commercially.

11. If you are interested in an exclusive or partially exclusive license, please provide an additional explanation of why you believe a non-exclusive license would be insufficient to bring this technology to market.
12. Does the company anticipate the need for technical assistance from the ERDC-CERL either in the form of technical support or research and development sponsored by your company? If so, provide details on the technical assistance needed.
13. Any other information which applicant believes will support a determination to grant the license to applicant.
14. Who is the primary person (and his/her position title, telephone number and email address) within your company with whom licensing discussions can be held.
15. Does this person have signature authority for license agreements? If not, who will be the signatory on any license agreement that may result from these discussions?

Signature of Applicant or Representative of Applicant:

Name
Title

Date

Appendix A

Commercialization Plan

The License Applicant

- Connections in the market
- Capability to fulfill the proposed plan
- Applicant's products/services similar to those being proposed

Please be sure your response addresses the economic and financial impact of your company's Commercialization Plan, e.g. jobs expected to be created and any other factors affecting company and local community.

Technology Development/Distribution Plan

- Development efforts lying ahead
- Manufacturing plan
- Additional testing and prototyping
- Capital investment
- Milestones and timeline

Please be sure your response addresses the event of a surging and/or variable demand in 3 to 5 years. Provide details of how such demand will be effectively met including aspects of personnel, hardware, and communication.

BUILDER™ Services/Product Launch

- Services and product to be initially launched
- How that will happen
- Projected roadblocks and competition
- Future plans to grow sales
- Geographical limitations or planning

Please be sure your response addresses what specific products and services will be offered and to whom, e.g., Sales, Distribution, Use and Technical Support; Assessment Services; Training; Application Hosting, and Integration and Custom Development. What portion of BUILDER™ usage will be in-house and what portion of BUILDER™ support will be out of house? What platforms are intended both initially and, potentially, in the future? Provide a general range for an initial budget for BUILDER™ promotion and how that effort might be

conducted (including in-kind contributions). Once a license is granted, how soon will customers benefit from BUILDER™?

Projected Revenue Potential

Adapt the table below to appropriately reflect your federal AND non-federal revenue streams. A license is not required for federal purposes however those sales are indicative of skills and company interest in commercialization. **If your sales do not project a revenue stream from non-federal sales, then a license is not needed.**

Please be sure your response includes explanatory material about the table such as how you determined the projected federal and non-federal sales. It should have sufficient detail to indicate what will be marketed (Sales, Distribution, Use and Technical Support; Assessment Services; Training; Application Hosting, and Integration and Custom Development). What additional resources might be required for this plan and are those resources readily available in the market?

	2017	2018	2019	2020	2021
Projected Sales: federal (\$K/year)					
Projected Sales: non-federal (\$K/year)					
Total Sales Revenue (\$K/year)					
Est. Fees/Royalties on Non-Federal Sales (\$K/year)					

The following information will be required in your annual report.

**ROYALTY REPORT
FOR
NON-EXCLUSIVE PATENT AND COPYRIGHT LICENSE AGREEMENT
BETWEEN
THE UNITED STATES OF AMERICA,
AS REPRESENTED BY THE SECRETARY OF THE ARMY
AND
[LICENSEE NAME]**

Date: _____

Sales Period:

Pursuant to Patent License Agreement #:

Licensed Product Name: **BUILDER™**

Partner Address: _____

Partner POC Email Address: _____

Partner POC Phone Number: _____

Summary of efforts made to achieve practical application of BUILDER™. Provide an explanation of the promotional efforts that were implemented to increase use of the licensed product.

Users	# of new users	Names of new users	# Made, used, or sold by LICENSEE
DoD			
Non-DoD Federal Agencies			
Private sector			

Amount of royalties due from the sale of BUILDER™: _____

- This royalty payment includes the annual license fee.
- This royalty payment does not include the annual license fee.

*** Please attach detailed royalty payment calculations.**

This report must be sent to:

U.S. Army Engineer Research and Development Center
 ATTN: CEERD-ZBT-O (Dr. Phoebe E. Lenear)
 2902 Newmark Drive
 Champaign, IL 61822-1076

Appendix B

Proposed Standard Royalties

The company seeks a non-exclusive right to distribute and provide services for BUILDER™ software for facility asset management. A nonrefundable license issue fee will be due within thirty (30) days of the fully executed patent license agreement (PLA). This fee will be an advance against royalty payments for the 1st year of the PLA.

Below is a table guiding royalties based on commercial square footage for the *Sales, Distribution, Use and Technical Support* service area.

Earned Royalty Table					
	Basic	Express	Standard	Premium	Expansion Blocks
Facility assets serviced in gross square feet	500k	1.0M	2.5M	10M	10M SF increments
Royalty at time of sale	\$750	\$1,250	\$2,500	\$7,500	\$5,000
Royalty for annual maintenance	\$375	\$625	\$1,250	\$3,750	\$2,500

Appendix C

Evaluation Criteria for Commercialization Plan

Ensure that your commercialization plan addresses the criteria associated with the *Sales, Distribution, Use and Technical Support* as well as the criteria associated with any of the four service areas you have selected. Your commercialization plan will be evaluated based on these criteria as outlined below.

Criteria for Sales, Distribution, Use and Technical Support

Product sales and support: provides software to end-users with services for installation and performance optimization, and software support/help desk

S-1 Software License Inventory: Applicants provide information that they have supported processes for compiling and maintaining software license inventories and have the ability to analyze inventory data to ensure compliance with software license agreements.

S-2 Help Desk Support: The application and/or business plan submitted conveys applicant's ability to provide authorized or Certified Professionals, and demonstrates applicant's ability to collect, retain, evaluate and act upon complete and accurate information regarding sales, marketing, licensing, and call center support.

S-3 Help Desk Communication: Due to the heavy reliance on various forms of communication (e.g., e-mail, telephone, or in-person interactions with vendors, customers, personnel, and management), application and/or business plan demonstrates applicant's outstanding written and verbal communication abilities. Managers must demonstrate exceptional leadership and problem-solving skills. (e.g., experience working with multiple clients).

S-4 Technical Support: The application conveys applicant's understanding of the technical products and services being offered. Demonstrates technical support of BUILDER or similar system, operating systems, database and web server

S-5 Technical Staff: The application and/or business plan conveys the applicant's ability to retain and maintain the skills needed to help the organization reach its business goals.

Criteria for Assessment Services

Services include implementation, field inspections, assessment activities, and data management.

A-1 Assessment Expertise and Experience: The commercialization plan submitted clearly demonstrates applicant's expertise and experience in performing assessment services. Applicant has completed BUILDER™ (or similar type system) assessment services for a minimum of ten million (10M) square feet. Examples of expertise include relevant BUILDER™ or similar assessment projects. At least ten project examples 100% complete, the remaining projects 90% or more complete. Applications must state the percentage (%) of total project performed by the applicant, and the number of prime employees and subcontractor(s) that directly perform assessments with the amount of square footage assessed.

A-2 Assessment Staff: The commercialization plan submitted indicates that the applicant is staffed with professional, qualified engineers, architectural engineers, architects, trades people, technicians, and specialists. Education, registration, resumes, and relevant experience in the assessment service area are applicable.

Criteria for Training

Involves developing and offering training materials and courses to educate service providers, engineering and computer science students, and end-users in all of the business lines; creating or maintaining accreditation and course certifications, and providing training-related follow up help services.

T-1 Training Expertise and Experience: The commercialization plan clearly demonstrates the applicant's expertise and experience in performing training for adult and student learners in the building industry.

T-2 Training Assessment and Development: The application conveys applicant's ability to (1) determine in-person, instructor-led or self-paced, e-learning, and virtual/on-line training, complete with stages and budget and assessment of needs; (2) establish supporting business agreements for training opportunities, and (3) develop, modify and update training/curriculum plans, course manuals, and print/recorded materials.

T-3 Training Personnel: The applicant has professional, qualified trainers (e.g., engineers, architects, specialists, and technicians) on staff. Evaluation will consider education,

registration, resumes, and relevant experience in providing training to professionals, technicians and trades people. Applicant must have certification and experience in leading teams in BUILDER or similar system.

T-4 Training Plan: Application provides evidence that training plans include recent/relevant case studies, projects, lessons learned and cost analysis.

Criteria for Application Hosting

Provides hosting environment, either Platform as a Service (PaaS) via bring your own license, or Software as a Service (SaaS) via provider-acquired license, to deliver SMS to users via service arrangement.

AH-1 Infrastructure: The commercialization plan submitted clearly demonstrates the potential licensee's expertise and experience in application hosting solutions; such as balancing workloads, authentication, and data access, and scalability based on user demand.

AH-2 Standards: Applicant has met or is working toward meeting a set of industry standards, for example: ISO 27000 Series, PCI Data Security Standard (DSS).

AH-3 Personnel: The applicant has professional, qualified system administrators on staff. Education, registration, resumes, and overall relevant experience in the type of work required and longevity in the application hosting area are applicable. Example certifications include: Microsoft Certified Solutions Associate (MCSA), Microsoft Certified Solutions Expert (MCSE), and Certified Information Systems Security Professional (CISSP). Minimum of Bachelor's Degree in a Computer Science or related field, or the equivalent combination of education, technical certifications or training, or work experience.

AH-4 Service: The applicant has programs, policies and processes in place to exercise due care to report results from the availability, delivery of services (24/7), cloud-computing service models: Infrastructure as a service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) completely, objectively, and accurately to all affected stakeholders to preserve the validity of data, work, quality control, and quality accuracy.

Criteria for Integration and Custom Development

Involves creating an interface with existing systems and data, and custom development to create a customization built on top of BUILDER SMS technology.

ICD-1 Standards: The commercialization plan conveys applicant's knowledge and skill in the latest standard practices of integration, interoperability and custom development across the industry (e.g., industry certification and information assurance).

ICD-2 Personnel: The commercialization plan conveys that the applicant employs or contracts authorized or certified professionals and candidates capable of custom development and integration of the established configuration of the BUILDER product line.