

ViBRANT—Virtual Biodiversity Research and Access Network for Taxonomy

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Abstract — Biodiversity science brings information science and technologies to bear on the data and information generated by the study of organisms, their genes, and their interactions. ViBRANT will help focus the collective output of biodiversity science, making it more transparent, accountable, and accessible. Mobilising these data will address global environmental challenges, contribute to sustainable development, and promote the conservation of biological diversity. Through a platform of web based informatics tools and services we have built a successful data-publishing framework (Scratchpads) that allows distributed groups of scientists to create their own virtual research communities supporting biodiversity science. The infrastructure is highly user-oriented, focusing on the needs of research networks through a flexible and scalable system architecture, offering adaptable user interfaces for the development of various services. In just 28 months the Scratchpads have been adopted by over 120 communities in more than 60 countries, embracing over 1,500 users. ViBRANT will distribute the management, hardware infrastructure and software development of this system and connect with the broader landscape of biodiversity initiatives including PESI, Biodiversity Heritage Library (Europe), GBIF and EoL. The system will also inform the design of the LifeWatch Service Centre and is aligned with the ELIXIR and EMBRC objectives, all part of the ESFRI roadmap. ViBRANT will extend the userbase, reaching out to new multidisciplinary communities including citizen scientists by offering an enhanced suite of services and functionality.