第22届世界疏浚大会-推进疏浚可持续发展上海共识 WODCON XXII —Shanghai Consensus for Promoting Sustainable Dredging Development

The 22_{nd} World Dredging Congress, held in Shanghai, was an important conference for the international dredging community to promote sustainable dredging development. Participants agreed that the dredging community is fully committed to global sustainable development and should play a crucial role in the process. To this end, all WODA members will acknowledge, and encourage, positive action and will pursue sustainability in the overall development of the dredging community, designing, planning and construction.

在中国上海召开的第22届国际疏浚大会是国际疏浚共同体努力推进疏浚的可持续发展的重要会议。与会者一致认为:国际疏浚共同体应当全身心地投入到全球可持续发展中,并发挥极其重要的作用。为此,世界疏浚协会联合会全体成员,将肯定和鼓励一切与之相关的积极措施,并在全行业的整体发展,包括规划设计和工程建设的进程中追求可持续的目标。

The WODA dredging community accepts the significance, necessity and justification of the UN Paris Climate Change Agreement, and the UN Sustainable Development Goals, to achieve a better and more sustainable future, for all the people, by 2030. As such, we will increasingly dedicate our designs, developments, planning and actions, to ensure a positive contribution to these goals and the guidelines. In this, we will work towards an optimum balance between social, economic and environmental aspects.

由世界疏浚协会联合会所囊括的国际疏浚共同体,承认"联合国巴黎气候变化协议"和"联合国可持续发展目标"的重要性、必要性和正当性,决心在2030年之前,为全人类实现一个有更加美好和可持续的未来而努力.为此,我们将更多地改进我们的设计、发展、规划和工程措施,以保证我们对相关目标和发展指南的实现做出积极的贡献.在此过程中,我们将努力实现社会、经济和环境的协调发展。

The common vision of dredging community is to contribute positively to a world where people and nature exist in harmony.

Respecting and adapting to nature, and maintaining an ecosystem where people live in harmony with nature, is an important part of the foundation on which the dredging community realises and creates its value. We aim to fully endorse the Sustainable Development Goals, actively promote the green development of the dredging industry, and create a highly efficient, sustainable and environmentally friendly infrastructure.

为建设人与自然和谐共生的世界做出积极的贡献是疏浚共同体发展的共同愿景。

尊重自然、顺应自然、保护人与自然和谐相处的生态系统,是疏浚共同体实现和创造其自身价值的重要根基。 我们将全面落实联合国可持续发展目标,积极推进疏浚业的绿色发展,建设高效率的、可持续的、并且与环境 友好的基础设施。

The sustainable services for infrastructure can continue to be improved by following the principles of 'Working with Nature' and 'Optimal Ecological Value'.

Based on a systematic understanding of the integrated relationship between nature, society and economy, and the sustainable services needed to improve infrastructure, our objective should focus on the following principles in dredging projects:

遵循"与自然共建", "生态价值最优化"的原则,持续改善对全球基础设施的可持续服务。

基于对自然、社会、经济,以及为改善基础设施所需可持续服务的综合关系的系统性认识,我们应在疏浚工程中更关注以下原则:

| · Working with Nature: using natural processes to improve design. Working with, instead of against, nature, can make the ecosystem to develop in a more sustainable way. |
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| □ "与自然共建"原则 :运用大自然的过程来改进规划, 与自然协作,而不是违背自然 ,以实现生态系统更加可持续的发展。 |
| · Resource efficiency: minimising and optimising the use of energy and resources. Reduces the total lifecycle design costs. |
| □ "资源效率"原则:要求最小化和最优化能源和资源的使用。以降低项目的总生命周期成本。 |
| · Circular Design: closing the production chains by using waste as a resource. Leads to cheaper design because less new materials are being produced and transported, such as with beneficial use of dredged material. □ "循环设计"原则:通过将废弃物作为资源再利用从而实现循环的生产链. 比如用疏浚土资源化再利用可以使疏浚工程整体更经济,减少生产和运输中的新材料的使用。 |
| · Adding project value: serving multiple functions with a project in an optimum way. Adds extra value, and thus an extra advantage, by a relatively small alteration to design. □ "增加价值"原则: 以最佳方式促使工程项目实现多元功能。通过较小的设计改动,来增加额外价值,从而实现项目的额外收益. |
| □ Flexible Design: designs can be adapted easily to new circumstances and changing needs. By making designs flexible, they are cheaper to modify to create future benefits. □ "灵活设计"原则: 意味着工程设计应更适宜地适应新的环境和需求,通过灵活设计,可以更经济地对项目进行优化以在未来创造更大的利益. |
| □ Societal Design: encourages the dredging community to work with different societal and physical measures, within the project mandate, which can achieve project goals to a larger extent. □ "社会设计"原则: 鼓励疏浚共同体在项目的任务范围内采用不同的社会和工程措施,从而在更大程度上实现项目 |
| 回 在云及行 原则 . 致励 <u>师夜共同体任项目的任务</u> 范围内未用不同的任宏和工程指施,从而任史人程度工实现项目的目标。 |

Accelerate dredging innovation, and progress, in the process of the new technological revolution.

Technology and design innovation, based on a better understanding of the project environment, is the driving force behind the industry's progress. Faced with the high-quality development needs, challenging complex projects, and the need to protect the ecological environment, we must adapt to trends, and make full use of advanced technologies, such as big data and Internet of Things, to better monitor and understand nature, and to grasp how dredging technology and construction modes are changing.

汇聚新技术革命的动能,加速疏浚业创新进步。

建立在对项目环境更充分的理解的基础上的技术创新,是行业发展的动力。面对高质量的发展需求、充满挑战的复杂工程、以及保护生态环境的需要,我们必须适应形势,充分利用大数据和物联网等先进技术,更好地尊重大自然,并把握疏浚技术和工程模式的创新点.

Enhance the communication, mutual trust and cooperation, within the dredging community to achieve sustainable development

Promoting global sustainable development is the common responsibility of the entire dredging community and a mean to achieving sustainable development. "Sustainable dredging leads to a better world." We believe in the future of the dredging community, WODA members will work together to move forward based on the sustainable goals!

加强在国际疏浚共同体内的沟通,互信,合作,从而实现可持续发展.

促进全球可持续发展是整个国际疏浚共同体的共同责任,也是实现可持续发展的重要途径。"可持续疏浚让世界更美好",我们相信疏浚业的未来。世界疏浚协会联合会成员将基于可持续发展目标,协力前行!