CLAIMS

1. A method, performed by an electronic device, for enabling operations associated with a shipment of a container at a terminal, the method comprising:

obtaining input data associated with the shipment of the container and terminal data associated with the terminal;

simulating, based on the input data and the terminal data, one or more terminal operations;

determining, based on the one or more simulated terminal operations, one or more performance metrics associated with the shipment; and

providing the one or more performance metrics.

2. The method according to claim 1, wherein the one or more of the determined performance metrics comprise one or more of: terminal equipment performance parameter, a crane intensity parameter, a port movement parameter, a container movement parameter, a crane movement parameter, a crane lift parameter, a rope attachment parameter, and a last line removal parameter.

3. The method according to any of the previous claims, the method comprising:

generating, based on the one or more determined performance metrics, control data for controlling an operation associated with the shipment; and

controlling, based on the control data, an operation associated with the shipment.

4. The method according to any of the previous claims, wherein the method comprises obtaining historical data indicative one or more of: one or more historical shipments, historical Berth planning, and one or more historical terminal operations, wherein simulating, based on the input data and the terminal data, the one or more terminal operations comprises:

- generating, based on the input data, the terminal data, and the historical data, a distribution indicative of historical terminal operations; and
- predicting, based on the distribution, one or more terminal operations.

5. The method according to claim 4, wherein simulating the one or more terminal operations comprises determining a route to a yard allocation for the container, and terminal equipment associated with carrying out the route, by applying a routing technique to one or more of: the input data, the terminal data, and the historical data.

6. The method according to any of claims 4-5, wherein determining, based on the one or more simulated terminal operations, one or more performance metrics associated with the shipment comprises predicting, based on the one or more simulated terminal operations and/or based on the distribution, one or more performance metrics.

7. The method according to any of the previous claims, wherein the method comprises determining, based on the input data and/or the terminal data, constraint data indicative of one or more constraints associated with the shipment and/or the terminal.

8. The method according to any of the previous claims, wherein the method comprises determining, based on the one or more predicted performance metrics, bottleneck data indicative of a bottleneck of one or more operations associated with the shipment of a container at a terminal.

9. The method according to claim 8, wherein determining bottleneck data indicative of a bottleneck of one or more operations associated with the shipment of a container at a terminal comprises determining whether at least one of the predicted performance metrics satisfy one or more criteria.

10. The method according to claim 9, wherein the method comprises, upon determining that at least one of the predicted performance metrics do not satisfy a criterion of the one or more criteria, providing the bottleneck data to a user device.

11. The method according to any of the previous claims, wherein the method comprises updating, based on a user input, the input data, and the terminal data.

12. The method according to claim 11, wherein the method comprises simulating, based on the updated input data and the updated terminal data, one or more updated terminal operations.

13. The method according any of claims 3-12, wherein controlling, based on the control data, the operation associated with the shipment comprises one or more of: updating a yard allocation of containers in the terminal, and updating operations of terminal equipment at the terminal.

14. An electronic device comprising memory circuitry, processor circuitry, and an interface, wherein the electronic device is configured to perform any of the methods according to any of claims 1-13.

15. A computer readable storage medium storing one or more programs, the one or more programs comprising instructions, which when executed by an electronic device cause the electronic device to perform any of the methods of claims 1-13.